EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Board of Directors Meeting

AGENDA

Wednesday, June 12, 2019
11:00 a.m. – 12:00 p.m.

San Joaquin County – Robert J. Cabral Agricultural Center
2101 E. Earhart Avenue – Assembly Room #1, Stockton, California

I. **Call to Order/Pledge of Allegiance & Safety Announcement/Roll Call**

II. **SCHEDULED ITEMS** – ***Presentation materials to be posted on ESJGroundwater.org and emailed prior to the meeting. Copies of presentation materials will be available at the meeting.***

A. Discussion/Action Items:

1. Approval of May Meeting Minutes
2. Bundle Review & GSP Draft Release Process
3. Outreach & Groundwater Sustainability Workgroup Update
4. Fourth Informational Meeting – July 18, 5-8PM (Robert J. Cabral Agricultural Center, Stockton)
5. Inter-basin Coordination
6. Groundwater Dependent Ecosystems (GDEs)
7. Financial Report and Budget Request
8. DWR Update
9. July Agenda Items and Meeting Location Change

B. Informational Items (see attached):

1. May 14, 2019, Email from Mary Elizabeth, "UCS UCD Water and Climate Meeting 5.22.19 6-9pm"
2. May 29, 2019, Public Policy Institute of California, "Ellen Hanak: Water and the Future of the San Joaquin Valley"
3. May 2019, DWR, "Planning Grants Proposal Solicitation Package – Round 3"
4. June 25, 2019, DWR, "WEBINAR: Bulletin 74 Well Standards Update Kickoff"
5. July 2, 2019, SWRCB, "Concerning Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and Tulare Lake Basin to Incorporate a Central Valley-wide Salt and Nitrate Control Program"

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY
Board of Directors Meeting
AGENDA
(Continued)

(Continued on next page)

III. **Public Comment (non-agendized items)**

IV. **Directors' Comments**

V. **Future Agenda Items**

VI. **Adjournment**

Next Regular Meeting
July 10, 2019 at 11:00 a.m.
Note: The JULY 10 meeting will be held at the Manteca Transit Center
220 Moffat Blvd, Manteca, CA 95336

Action may be taken on any item

Agendas and Minutes may also be found at http://www.ESJGroundwater.org
Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact San Joaquin County Public Works Water Resources Staff at (209) 468-3089 at least 48 hours prior to the start of the meeting.

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY
Board Meeting Minutes
May 8, 2019

I. Call to Order/Pledge of Allegiance & Safety Announcement/Roll Call

The Eastern San Joaquin Groundwater Authority (GWA) Board meeting was convened by Vice-Chair Mel Panizza at 11:08 A.M., on May 8, 2019, at the Robert J. Cabral Agricultural Center, 2101 E. Earhart Ave. Stockton, CA. Following the Pledge of Allegiance, a representative of the San Joaquin County Office of Emergency Services provided the required safety information.

In attendance were Vice-Chair Mel Panizza, Directors George Biagi, Jr., David Breitenbucher, Walt Ward, David Fletcher, Mike Henry, Tom Flinn, Eric Thorburn, Alternate Directors Charlie Swimley, Robert Holmes, and Reid Roberts.

II. SCHEDULED ITEMS

A. Discussion/Action Items:

1. Approval of Minutes of April 10, 2019

Motion:
Director Eric Thorburn moved, and Director David Britenbucher seconded, the approval of the April 10 minutes. The motion passed unanimously.

2. Roadmap Update and Deliverables

Ms. Alyson Watson walked through the roadmap and revised deliverable review schedule.

3. Bundle 1 – Draft Chapter Overview

Ms. Watson indicated the Bundle 1 draft GSP chapters have been posted to the website.

4. Management Actions

Director Mike Henry commented on the wording for predominant focus on supply-side projects. He noted concern on how it will be perceived and believes the focus is implied. Director Tom Flinn noted the blending of supply and demand side. He questioned if we are locally going to take on pumping restrictions and noted the planning exercise should also be used for marketing to the public of what will be implemented. Alternate Director Robert Holmes questioned if the plan would fail without pumping restrictions. Ms. Watson responded no. Alternate Director Holmes indicated the need for a vehicle for including pumping restrictions.

Motion
Director Thorburn moved, and Director Flinn seconded the approval as presented. Director George Biagi opposed. The motion carried with one negative vote.

5. Sustainable Management Criteria for Six Sustainability Indicators

Chronic Lowering of Groundwater Levels
Ms. Watson walked through the chronic lowering of groundwater levels sustainability indicator and proposed sustainable management criteria.

Alternate Director Holmes indicated South San Joaquin Irrigation District (SSJID) is not comfortable with the data for those wells. Director Thorburn asked about the use of domestic wells included around the City of

Stockton. Mr. Brandon Nakagawa indicated there were concerns about having a driver be the domestic well depths for the selection of this criteria. Ms. Christy Kennedy noted there has been communication with the urban areas, for cities of Lodi and Stockton, and the number of domestic wells was looked at. Ms. Watson indicated that this analysis showed there are domestic wells in those areas, so using domestic wells could be an applicable screen. The challenge becomes how do we manage those wells. Director Walt Ward questioned if we know how the domestic wells are being used. Ms. Kennedy replied that the domestic well information comes from the Online System for Well Completion Reports (OSWCR) database, and that that information is not available. Director Flinn stated that he presumes the group will have the ability to adjust what is in the plan over time. He noted his appreciation for the work that has been done. Director Thorburn indicated support for the overall structure and questioned if it is a similar approach to other basins. Ms. Watson stated we have seen this in other areas but each basin is taking a varied approach. Director Thorburn questioned if the proposed thresholds would be protective of groundwater-dependent ecosystems (GDEs). Ms. Kennedy indicated this analysis was completed for interconnected surface water-groundwater systems.

Vice-Chair Mel Panizza called for director comment. Director Thorburn noted that after looking at the number of domestic wells covered, he is more comfortable with the coverage of the Subbasin. Alternate Holmes asked if the age of the domestic wells was considered. Ms. Kennedy noted that that is not a field that is available in the database. Alternate Holmes stated that 50-60 year old wells exceed the reasonable life of the well.

Motion
Director Dave Fletcher moved, and Director Thorburn seconded the approval of the motion as worded. The motion passed unanimously.

Reduction in Groundwater Storage
Ms. Watson walked through the reduction in groundwater storage sustainability indicator and proposed sustainable management criteria.

Director Flinn noted that one of the one representative monitoring network wells is located north of the Mokelumne River and asked if special consideration was needed. Ms. Watson stated that it is part of the 19 wells. Director Flinn responded that activities to the north could affect the well. Director Henry asked a clarifying question on the definition of undesirable results for this sustainability indicator. Ms. Watson clarified, indicating that groundwater levels will be protective against undesirable results for reduction in groundwater storage.

Motion
Director Ward moved, and Director Henry seconded the approval of the motion as worded. The motion passed unanimously.

Degraded Water Quality
Ms. Watson walked through the degraded water quality sustainability indicator and proposed sustainable management criteria. Director Thorburn indicated support for the numbers and requested that language be included in the plan to indicate that the basis for 600 mg/L is for aesthetic concerns, and 1,000 mg/L is where we begin to see crop impacts.

Motion
Director Henry moved, and Director Thorburn seconded the approval of the motion as worded. The motion passed unanimously.

Seawater Intrusion
Ms. Watson walked through the recommendation from the Advisory Committee on the seawater intrusion sustainability indicator as well as the trigger and action plan. Director Flinn asked a how the group can be responsible for elements they have no control over (i.e., sea level rise). Vice-Chair Panizza questioned if the language in the law indicated what should be addressed. Mr. Paul Wells responded that climate change needs to be considered. Director Thorburn provided context from his Board.

Motion
Director Thorburn moved, and Director Fletcher seconded the approval of the motion as worded. Director Flinn opposed. The motion carried with one negative vote.

Land Subsidence
Ms. Watson walked through the land subsidence sustainability indicator and proposed sustainable management criteria. Director Thorburn noted his support for a motion. He noted there is limited data and no known infrastructure issues specifically where they Corcoran Clay exists.

Motion
Director Ward moved, and Director Flinn seconded the approval of the motion. The motion passed unanimously.

Depletion of Interconnected Surface Waters
Ms. Watson walked through the depletion of interconnected surface water sustainability indicator and proposed sustainable management criteria. Director Thorburn noted a discussion around new additional monitoring wells for better quantification. Alternate Director Holmes asked what percent of streams have been classified as interconnected. Ms. Kennedy noted we have this information and can provide it.

Motion
Director Thorburn moved, and Alternate Director Holmes seconded the approval of the motion. The motion passed unanimously.

6. Monitoring Network
Ms. Jennifer Spaletta (representing North San Joaquin Water Conservation District) indicated the cost of monitoring and questioned if there has been an evaluation of if all proposed monitoring wells are needed. She requested clarification of the action, specifically who is going to perform the monitoring and how will this be paid for. Ms. Spaletta asked DWR if it is acceptable for the plan to leave out who monitors and how the monitoring is paid for. Mr. Wells noted that the plan will be with DWR for two years and monitoring will need to be ongoing at that time. He noted the annual report will show the results from the monitoring network. Director Henry questioned how many of the wells are currently monitored through other programs and noted that this information could already be available. Mr. Nakagawa noted that many of these wells are already being monitored by someone but most are not currently tested for water quality. He noted costs will be driven by additional water quality testing. Ms. Spaletta stated that it looks like we are asking for an approval of a monitoring network, and it is important to understand how much additional work this approval will generate. She asked: how much of the work is already being done and funded and how much would be added as new work? Director Flinn noted general concern about how costly this could be without full clarification. Director Thorburn noted that the wells are not currently monitored quarterly and indicated that there are no representative monitoring wells located within Oakdale Irrigation District in Eastside GSA. He requested adding a minimum of one well in Eastside GSA to raise the total number of representative monitoring wells to a minimum of 20.

Motion
Director Thorburn moved, and Alternate Director Holmes seconded the approval of the motion with cost implications added and with the addition of a minimum of one representative monitoring well in Eastside GSA. The motion passed unanimously.

Vice-Chair Panizza called to move agenda items 7-10 to the following meeting due to time restrictions. All members approved.

7. **Groundwater Dependent Ecosystem Approach**

8. **Inter-basin Coordination**

9. **DWR Update**

10. **June Agenda Items**

B. Informational Items:

1. February 11, 2019, DWR, "2018 Basin Boundary Modifications – FINAL Decisions"
2. April 10, 2019, Email from John Lambie, "Re: links to recent information on where to best store groundwater"
3. April 10, 2019, Email from John Lambie, "Re: ESJ Groundwater Authority Board and Advisory Committee Meeting AGENDAS for April 10, 2019"
4. April 10, 2019, Stanford News, "Stanford study offers a way to map where flooded fields best replenish groundwater"
5. April 29, 2019, San Francisco Chronicle, "Gov. Newsom issues executive order demanding drought-climate plan"
6. April 30, 2019, DWR, "Statewide Map of SGMA 2019 Basin Prioritization Results"
7. April 2019, SWRCB, "Sustainable Groundwater Management Act: Funding

III. **Public Comment (non-agendized items):**

Ms. Mary Elizabeth (Sierra Club) asked for clarification on which thresholds will be used for which wells, and for information regarding domestic well density. She noted there should be an opening for public comment before a vote is taken, following discussion of each agenda item. Regarding the necessity for a facilitator, she indicated it would be useful. On the additional GSP elements, she noted there are areas in the County where there are contaminant plumes impacting domestic and municipal wells. She stated much information has included background that is only available with staff discussion and she noted she would like to see more information provided at open meetings on what those discussions entailed. She indicated all of the members of the Board and Advisory groups should forward the draft chapters for review. On the question regarding future governance, she noted the Groundwater Basin Authority (GBA) is still on the books.

Ms. Mary Elizabeth then spoke to issues in regard to well ordinances and well installations in areas of overdraft. She noted the stakeholder Workgroup has expressed the problem of continuing to put groundwater wells where we have overdraft and that there needs to be full disclosure on how the different

counties will handle new wells. Lastly, she suggested that each agency have the opportunity to review the GSP before the Board makes the final approval (rather than agency approval following Board approval).

IV. Directors' Comments:

V. Future Agenda Items:

VI. Adjournment:

The May 8 meeting was closed at 12:32 pm. Vice-Chair Panizza adjourned the meeting.

Next Regular Meeting: June 12, 2019 at 11:00 a.m.
San Joaquin County – Robert J. Cabral Agricultural Center, 2101 E. Earhart Ave., Assembly Rm. #1, Stockton, CA

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Joint Exercise of Powers Board of Directors Meeting

MEMBER SIGN-IN SHEET

Location: SJ COUNTY ROBERT J. CABRAL AG CENTER Date: 05/08/19 Time: 11:00 AM

INITIAL	Member's Name	GSA	Phone	Email
	John Freeman	Cal Water Member	209-547-7900	jfreeman@calwater.com
	Steve Cavallini	Cal Water Alternate	209-464-8311	scavallini@calwater.com
GB	George Biagi, Jr.	Central Delta Water Agency Member	209-481-5201	gbiagi@deltabluegrass.com
	Dante Nomellini	Central Delta Water Agency Alternate	209-465-5883	ngmplcs@pacbell.net
	Grant Thompson	Central San Joaquin Water Conservation District Member	209-639-1580	gtom@velociter.net
WR	Reid Roberts	Central San Joaquin Water Conservation District Alternate	209-941-8714	reidwroberts@gmail.com
	Stephen Salavatore	City of Lathrop Member	209-941-7430	ssalvatore@ci.lathrop.ca.us
		City of Lathrop Alternate		
	Alan Nakanishi	City of Lodi Member	209-333-6702	anakanishi@lodi.gov
	Charlie Swimley	City of Lodi Alternate	209-333-6706	cswimley@lodi.gov
DMB	David Breitenbucher	City of Manteca Member	209-456-8017	dbreitenbucher@ci.manteca.ca.us
	Mark Houghton	City of Manteca Alternate	209-456-8416	mhoughton@ci.manteca.ca.us
	Jesús Andrade	City of Stockton Member	209-937-8244	Jesus.Andrade@stocktonca.gov
	Dan Wright	City of Stockton Alternate	209-937-5614	Dan.Wright@stocktonca.gov

INITIAL	Member's Name	GSA	Phone	Email
	Russ Thomas	Eastside San Joaquin GSA Member	209-480-8968	rthomasccwd@hotmail.com
WW	Walter Ward	Eastside San Joaquin GSA Alternate	209-525-6710	wward@envres.org
DF	David Fletcher	Linden County Water District Member	209-887-3202	dqfpe@comcast.net
	Paul Brennan	Linden County Water District Alternate	209-403-1537	ptbrennan@verizon.net
MH	Mike Henry	Lockeford Community Services District Member	209-712-4014	midot@att.net
	Joseph Salzman	Lockeford Community Services District Alternate	209-727-5035	lcsd@softcom.net
	Eric Schmid	Lockeford Community Services District Alternate	209-727-5035	lcsd@softcom.net
TF	Tom Flinn	North San Joaquin Water Conservation District Member	209-663-8760	tomflinn2@me.com
	Joe Valente	North San Joaquin Water Conservation District Alternate	209-334-4786	jcvalente@softcom.net
ET	Eric Thorburn, P.E.	Oakdale Irrigation District Member	209-840-5525	ethorburn@oakdaleirrigation.com
		Oakdale Irrigation District Alternate		
	Chuck Winn	San Joaquin County Member	209-953-1160	cwinn@sjgov.org
	Kathy Miller	San Joaquin County Alternate	209-953-1161	kmiller@sjgov.org
	John Herrick, Esq.	South Delta Water Agency Member	209-224-5854	jherrlaw@aol.com
	Jerry Robinson	South Delta Water Agency Alternate	209-471-4025	N/A
BH	~~Dale Kuil~~ BOB HOLMES	South San Joaquin GSA Member	209-670-5829	dkuil@ssjid.com
BH	Robert Holmes	South San Joaquin GSA Alternate	209-484-7678	rholmes@ssjid.com
MP	Melvin Panizza	Stockton East Water District Member	209-948-0333	melpanizza@aol.com
	Andrew Watkins	Stockton East Water District Alternate	209-948-0333	watkins.andrew@verizon.net
	Anders Christensen	Woodbridge Irrigation District Member	209-625-8438	widirrigation@gmail.com
	Doug Heberle	Woodbridge Irrigation District Alternate	209-625-8438	heberlewid@gmail.com

Eastern San Joaquin Groundwater Authority Staff & Support

INITIAL	Member's Name	Organization	Phone	Email
	Kris Balaji	San Joaquin County	468-3100	kbalani@sjgov.org
	Fritz Buchman	San Joaquin County	468-3034	fbuchman@sjgov.org
	Brandon Nakagawa	San Joaquin County	468-3089	bnakagawa@sjgov.org
	Mike Callahan	San Joaquin County	468-9360	mcallahan@sjgov.org
	Alicia Connelly	San Joaquin County	468-3531	aconnelly@sjgov.org
	Kelly Villalpando	San Joaquin County	468-3073	krvillalpando@sjgov.org
	Nancy Tomlinson	San Joaquin County	468-3089	ntomlinson@sjgov.org
	Andy Nguyen	San Joaquin County	953-7948	aynguyen@sjgov.org
	Anthony Diaz	San Joaquin County	468-3060	anthonydiaz@sjgov.org
	Rod Attebery	Neumiller & Beardslee / Legal Counsel	948-8200	rattebery@neumiller.com
	Monica Streeter	Neumiller & Beardslee / Legal Counsel	948-8200	mstreeter@neumiller.com

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Joint Exercise of Powers Board of Directors Meeting

OTHER INTERSTED PARTIES - SIGN-IN SHEET

Location: SJ COUNTY ROBERT J. CABRAL AG CENTER Date: 5/08/19 Time: 11:00 AM

INITIAL	Member's Name	Organization	Phone	Email
SAS	STACIE ANN SILVA	NCWL	—	—
	DENNIS MILLS	CALAVERAS COUNTY		
RS	Ryan Steger	Daughtery Poore		rsteger@daughtyparis.com
~~RH~~	~~Robert Holmes~~	~~SSJCSA~~		~~rholmes@SSJID.com~~
MBB	MIA BROWN	SSJID / ESJGSA		mbrown@ssjid.com
	J. My/OS	County		
JPP	Jonathan Pruitt	Catholic Charities	—	jpruitt@cctstockton.org
PW	Paul Wells	CA DWR		paul.wells@water.ca.gov
RE	Robert Emmens	EKI		remmens@ekiconsult.com
CSK	Christy Kennedy	Woodard & Curran		ckennedy@woodardcurran.com
AC	Alicia Connelly	SJ County		
JJ	Jessica Jones	SJ County		
	Mary Elizabeth	Sierra Club		
EM	Elba Mijangos	City of Manteca		

Eastern San Joaquin Groundwater Authority
GSA Outreach Activities - May 2019

Agency Name	Update Website	Use Outreach Slides	Post to Social Media	Other
Cal Water				
Central Delta Water Agency				
Central San Joaquin Water Conservation District				
City of Lathrop				
City of Lodi	Still current			
City of Manteca				
City of Stockton				
Eastside San Joaquin GSA		CCWD Board Meeting - 5/29		
Linden County Water District				
Lockeford Community Services District				Monthly billing statement & info
North San Joaquin Water Conservation District		Updated to website		5/5/19 - Outreach call with: Jennifer Rohde, Groundwater Scientist, The Nature Conservancy
Oakdale Irrigation District	Updated for May	Added to website		
San Joaquin County				SJ County Advisory Water Commission SGMA standing agenda item
South Delta Water Agency				
South San Joaquin Groundwater Sustainability Agency		SSJGSA Special Board Meeting - 5/22		
Stockton East Water District				
Woodbridge Irrigation District GSA				

Please indicate which of the above outreach activities your GSA has planned for the upcoming month. Please approximate date of completion.

Eastern San Joaquin Groundwater Authority
GSA Outreach Activities - June 2019

Agency Name	Update Website	Use Outreach Slides	Post to Social Media	Other
Cal Water				
Central Delta Water Agency				
Central San Joaquin Water Conservation District				
City of Lathrop				
City of Lodi	Still current			
City of Manteca				
City of Stockton				
Eastside San Joaquin GSA	CCWD Website Update	CCWD Board Meeting 6/26		
Linden County Water District				
Lockeford Community Services District				
North San Joaquin Water Conservation District				
Oakdale Irrigation District	Updated for June	Added to website		
San Joaquin County				
South Delta Water Agency				GSA Public Meeting - 6/13
South San Joaquin Groundwater Sustainability Agency		SSJGSA Board Meeting - 6/19		
Stockton East Water District				
Woodbridge Irrigation District GSA				

Please indicate which of the above outreach activities your GSA has planned for the upcoming month. Please approximate date of completion.

Eastern San Joaquin Groundwater Authority
GSA Outreach Activities - July 2019

Agency Name	Update Website	Use Outreach Slides	Post to Social Media	Other
Cal Water				
Central Delta Water Agency				
Central San Joaquin Water Conservation District				
City of Lathrop				
City of Lodi				
City of Manteca				
City of Stockton				
Eastside San Joaquin GSA		CCWD Board Meeting 7/24		
Linden County Water District				
Lockeford Community Services District				
North San Joaquin Water Conservation District				
Oakdale Irrigation District				
San Joaquin County				
South Delta Water Agency				
South San Joaquin Groundwater Sustainability Agency				
Stockton East Water District				
Woodbridge Irrigation District GSA				

Please indicate which of the above outreach activities your GSA has planned for the upcoming month. Please approximate date of completion.

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

1810 E. Hazelton Avenue
P. O. Box 1810
Stockton, CA
95201

(209) 468-3089
ESJgroundwater@sjgov.org
esjgroundwater.org

Eastern San Joaquin Groundwater Authority
Groundwater Sustainability Workgroup
April 10, 2019
4 – 5:30 p.m.
San Joaquin County Public Works Department
1810 E. Hazelton Ave., Stockton – Conference Room A

Committee Members in Attendance

	Name	Organization
	Colin Bailey	The Environmental Justice Coalition for Water
	Barbara Barrigan-Parrilla	Restore the Delta
X	Gene E. Bigler	PUENTES
	Drew Cheney	Machado Family Farms
	Robert Dean	Calaveras County Resource Conservation District
X	Mary Elizabeth	Sierra Club
X	David Fries	San Joaquin Audubon
	Joey Giordano	The Wine Group
	Jack Hamm	Lima Ranch
	Mary Hildebrand	South Delta Water Agency
X	George V. Hartmann	The Hartmann Law Firm
	Michael Machado	Farmer
	Ara Marderosian	Sequoia ForestKeeper
	Ryan Mock	J.R. Simplot Company
	Yolanda Park	Coop
	Jonathan Pruitt	Catholic Charities of the Diocese of Stockton
X	Will Price	University of the Pacific & Vice Chair, SJ County Advisory Water Commission
X	Daryll Quaresma	2Q Farming, Inc.
	Jennifer Shipman	Manufacturers Council of the Central Valley
	Chris Shutes	California Sportfishing Protection Alliance
	Michael F. Stieler	CGCS, Spring Creek Golf & Country Club
	Linda Turkatte	San Joaquin County Environmental Health Department
	Ken Vogel	San Joaquin Farm Bureau Federation
X	Ted Wells	Trinchero Family Estates and Sutter Home Winery
	General Public	
X	Jane Wagner-Tyack	League of Women Voters of SJ County
X	Paul Wells	Department of Water Resources
	Andrew Watkins	Stockton East Water District
X	Bryan Pilkington	Private citizen

	Staff and Consultants	
X	Brandon Nakagawa	County ESJ GSP Project Representative
X	Michael Callahan	County ESJ
	Alicia Connelly	County ESJ
X	Alyson Watson	ESJ GSP Project Manager
X	Christy Kennedy	ESJ GSP Deputy Project Manager
	Lindsay Martien	ESJ GSP Deputy Project Manager
X	Cindy Thomas	Stakeholder Engagement & Public Outreach Consultant

Meeting Notes

I. Welcome

a. Alyson Watson welcomed the group at 4:04.
b. Alyson Watson reviewed the meeting agenda, emphasizing the focus would be on sustainability indicators and undesirable results for interconnected surface water.
c. Alyson Watson provided an update on there of the undesirable results - seawater intrusion, storage and subsidence.

II. Meeting Objectives

a. Alyson Watson discussed the meeting objectives:
    i. Review and discuss the interconnected surface water sustainability indicator.
    ii. Review approach for establishing sustainable management criteria.
    iii. Understand proposed monitoring network.

III. Interconnected Surface Water

a. Alyson Watson discussed the Depletion of Interconnected Surface Water and why it is a concern.
b. Alyson Watson discussed the minimum threshold.
    i. Major river systems in the Subbasin are highly managed.
    ii. Instream flow requirements, water quality standards and water rights govern upstream releases.
c. Alyson Watson shared DWR Guidance considerations and discussed some of the questions asked.
    i. What are the historical rates of stream depletion for different water year types?
    ii. What is the uncertainty in streamflow depletion estimates from analytical and numerical tools?
    iii. What is the proximity of pumping to streams?
    iv. Where are groundwater dependent ecosystems in the basin?
    v. What are the agricultural and municipal surface water needs in the basin?
    vi. What are the applicable State or federally mandated flow requirements?
d. Alyson Watson led a discussion regarding potential current or historical undesirable results that have been observed in the basin for depletion of interconnected surface water.
e. Will Price stated that surface water flowing into basins is not a right of those within the stream. He asked where one draws the line on rights of surface water.

f. Alyson Watson asked the group where they think the line should been drawn between surface water and groundwater, and the difference between reasonable and unreasonable.
g. Daryl Quaresma talked about a scenario of a free flow stream and pumping. Currently water districts can only pump flood flows to dry wells. The water now is being fought over by various agencies. He wants to know how people are going to recharge their basin now that streams that have never been monitored will now be monitored. He wants to understand how people will be able to recharge their basin and who determines flood flows, especially for unmonitored creeks and streams.
h. Brandon Nakagawa said this issue is very complicated. If there is water in a stream that belongs to someone and someone diverts it via pumping, etc. the owner of the stream can sue you and win. The better question is what actions have caused depletion.
i. Alyson Watson said an undesirable result is one that is significant and unreasonable. She clarified that we are discussing a riparian right and whether you can recharge for beneficial use.
j. Brandon Nakagawa clarified that values are at minimum of what we want to hear.
k. Mary Elizabeth said there are reports of salmon in the Calaveras River. Of the 30 projects proposed, there were multiple that were taking water from the Calaveras River. She noted that bypasses created could have positive benefits recharging parts of the cone of depression. She noted that taking the water and using it in lieu of groundwater is double dipping. She noted that there are other waterways in the county that are trash collectors because they are no longer used for water flow. She believes this is an interconnected problem. The other problem is diversions of the river. The decreased peak flows have resulted in sedimentation in the lower reach which have formed islands. People also live in the waterways there is a lot of trash that impacts the quality of life.
l. David Fries said the connection in drought years must be catastrophic and doesn't know how to get around that. He asked about the impact to wildlife resulting from groundwater extractions.
m. Alyson Watson noted that question is tricky because it is hard to determine what groundwater management plays on the impact to wildlife during dry years, no Delta flushing and invasive plant species.
n. Daryl Quaresma said years like this year there are multiple wetlands. He asked if that comes into consideration for groundwater recharge? He believes it should since it is a natural flow. He also noted there needs to be common sense involved in this process. He stated the facts that some irrigation districts started up in the last three weeks because if they do not use it, they lose it.
o. Brandon Nakagawa provided some clarification on flood releases. He noted that in a flood year, like this year, they have to release water. He indicated that the plan takes into consideration wet years and drought years. Everything is built into the baseline.
p. Alyson Watson noted the shifting of cropping patterns changes groundwater.
q. Bryan Pilkington asked among the current, historical and future undesirable results, what trends have we seen? When he moved to California in 1985, he irrigated his property by pumping water out of Bear Creek, which was on his property. He did not even know to use groundwater. He noted that when you project into the future, the inconsistency of the weather must be taken into consideration. He thinks public outreach is critical. Where is the water going to come from?

r. Alyson Watson said that this basin is fortunate because there is a lot of surface water that is not being used. Some districts could sell more water. There is an imbalance in this basin but there is a lot of surface water that can be used in lieu of groundwater. We can lay the groundwork to work together for bigger impact solutions.
s. Daryl Quaresma said South San Joaquin has extra water for sale. He asked how to get the water from where it is abundant to the cone of depression and noted that it is a long way for water to travel.
t. Alyson Watson said there are agencies in the cone of depression that have surface water but they aren't using it because it is not cost efficient. There are a lot of options to use surface water before groundwater. Groundwater elevations in certain areas will be managed – it can't continue to perpetually decline.
u. Brandon Nakagawa noted they will monitor where the issue is for minimum thresholds.
v. Mary Elizabeth asked if the wells located near surface water that have been pumping will be decreased, using the surface water and not groundwater. There needs to be a count of wells that are nearby streams and their distance need to be noted. There is too much variation in well ordinances. We need to adjust the distance for each of the counties in the basin.
w. Bryan Pilkington asked when recharge projects are arranged, does it have to have the best effects on the basin as a whole?

IV. Sustainability Indicators (Seawater Intrusion, Storage, Subsidence)

a. Alyson Watson described the three indicators:
    i. Seawater Intrusion
    ii. Reduction in Groundwater Storage
    iii. Land Subsidence
b. Alyson Watson noted we will be fully addressing all six sustainability indicators based on guidance from the Advisory Committee. She noted that today the Workgroup will be discussing three.
c. Alyson Watson discussed sustainable management criteria terminology and explained how minimum thresholds are determined. She noted we are regulated on the minimum threshold. The goal is to set those as numeric thresholds so we do not get to undesirable results.
d. Alyson Watson explained the consequences of violating minimum thresholds and potential intervention by the State Water Resources Control Board.

V. Sustainability Indicator: Seawater Intrusion

a. Alyson Watson discussed the salinity in the basin and the sources: San Joaquin Delta Sediments, Deep Deposits and Irrigation Return Water. The salinity we have in the basin is not caused by seawater intrusion.
b. Alyson Watson discussed the proposed isocontour line that was presented to the Advisory Committee and the associated sustainable management criteria.
    i. 2,000 mg/L chloride isocontour line.
    ii. The proposed contour would be between the westernmost monitoring points and the next most-westerly points.
    iii. Alternatively, it could be placed at I-5.
c. The plan is due in 2020 and will be updated 5 years later.

d. George V. Hartmann asked if the western wells are shut down because they were tied to seawater intrusion.
e. Brandon Nakagawa explained the driver of closing the wells was not specifically due to seawater intrusion.
f. George V. Hartmann asked what minimums they are using as a guide.
g. Alyson Watson noted the minimum is calculated through the historical low with an added buffer. Domestic wells are the floor for elevation.
h. Mary Elizabeth said with sea level rising the city of Stockton is protected.
i. Daryl Quaresma asked for more information about the isocontour line.
j. Alyson Watson noted that if there was seawater intrusion, there would be a migration. The isocontouor line serves as sentinels.
k. Ted Wells said the I-5 option is not good.
l. Alyson said this will be proposed to the Board next month.

VI. Sustainability Indicator: Reduction of Groundwater Storage

a. Alyson Watson discussed the historical model change in groundwater storage and the small variations.
    i. There has been a cumulative change of -0.05 MAF per year (-0.09%)
b. Alyson Watson discussed the process for using groundwater levels as a proxy. She discussed both approaches.
    i. Approach 1: Using groundwater levels as a proxy, with justification that the groundwater level minimum thresholds will be protective.
    ii. Approach 2: Set a threshold at a point at which undesirable results would occur based on volume at which groundwater is being accessed.
c. Approach 2: There is a greater understanding of the top management area of the aquifer with regard to water quality and other parameters. Uncertainty increases with depth, and having storage drop below that point is considered undesirable.
    i. Groundwater is currently pumped from Layers 1 and 2 of the model
    ii. Total volume at which groundwater is pumped: **24.3 MAF**
    iii. 53.0 MAF Total Storage – 24.3 MAF in the general zone of GW Management
    = **28.7 MAF as Proposed Threshold (Round to 30 MAF)**
d. The Advisory Committee is recommending Approach 1 to the Board.
e. George V. Hartmann said that groundwater levels are all that matter. People will not want to drill their wells deeper. He thinks it was a good recommendation. Why reinvent the wheel?
f. Will Price said the volume is more important than the depth.
g. Alyson Watson reminded the group that we can revaluate again in 2025. She noted it will continue to come up in discussion.
h. Will Price said he lived in Tucson and the city drew water from 600 feet deep and it did not bother them at all. They say the 600 foot water is always available and is not likely to go away even in drought periods. He asked why not think deep?
i. George V. Hartmann said our water is constantly being recharged from the water running from the mountains.
j. Mary Elizabeth asked if deeper wells have salinity issues.
k. Alyson Watson noted that the deeper you go, there may be more issues.

VII. Sustainability Indicator: Land Subsidence

a. Alyson Watson noted land subsidence has not been historically observed in the basin. We expect extremely low risk given basin conditions.
b. Daryl Quaresma said the point is the river – the brown area has more chance of subsidence. PG&E was trying to reset some posts and it was full of water and has higher groundwater.
c. Alyson Watson explained the recharge and what has been observed in that area. It is proposed to use groundwater levels as a proxy. She explained the two conditions of land subsidence.
    i. Land subsidence requires dewatering of subsurface materials and that those materials be compressible.
    ii. If the basin were to operate with the margin of operational flexibility. proposed for groundwater levels, future dewatering would take place in similar geologic units to those currently dewatered.
    iii. The dewatered materials are expected to behave the same way.
    iv. Therefore, additional declines in groundwater levels are unlikely to cause subsidence.
d. Christy Kennedy discussed the geological aspects of the cross section.
    i. The Advisory Committee recommends using groundwater levels as a proxy for land subsidence.
e. Alyson Watson hopes to have the recommended approach to the Board in May.

VIII. Monitoring Network

a. Alyson Watson explained the monitoring network and how it is used to monitor for conditions that would cause undesirable results. Monitoring must address the six sustainability indicators.
b. Mary Elizabeth was asked to point out the monitoring network wells in the cone of depression.
c. Alyson Watson noted there is a data gap. We are establishing wells for monitoring and setting thresholds for the future. We know we need to have it – the wells are not suitable for monitoring.
d. Bryan Pilkington asked about the monitoring wells in the Woodbridge area.
e. Alyson Watson said we have to cover Woodbridge or the entire basin will be out of compliance.
f. Alyson Watson explained the broad monitoring network and pointed out the new monitoring wells on the map. She explained the types of wells in the network.
g. Ted Wells asked how quickly things change. How often should we monitor? The data rarely changes. Can we just use the data and make a frequency determination? It was suggested that monitoring be adjusted from quarterly to semiannually.
h. Mike Callahan says it doesn't change often. We measure in spring when it is the highest point. We monitor again in the fall when it is at the bottom. There is so much interference in the data. The draw down is too variable from well to well. That is why we do it at the top and the bottom.
i. Alyson Watson said we can automate it or just do a high and a low.
j. Brandon Nakagawa discussed the cost of monitoring and the data quality and noted the need to increase costs.
k. George V. Hartmann asked how you keep people from stealing monitoring equipment.

IX. Announcements

a. The Administrative Information and HCM chapters will be posted to the website on May 1, in advance of the May Board meeting.
b. Mary Elizabeth asked for information on the wells located in the disadvantaged community. How many wells are in DAC areas, what GSAs are they in and construction details for small water system production wells and domestic wells.
c. The next meeting takes place on May 8.

X. Other Topics

Comments by Mary Elizabeth (March)

I am not sure about this statement, She noted that there is an approach for addressing enforcement or monitoring from the GWA. I think this is in reference to the JPA but not sure.

Here are some excerpts from the JPA:
To the extent the Members are not successful at jointly implementing the GSP within the Basin, or to the extent that any Member wishes to implement the GSP within its boundaries, the Authority intends to allow any individual Member to implement the GSP within its boundaries, and to work together with all Members to coordinate such implementation in accordance with the requirements of SGMA

2.6 The Members expressly intend that the Authority will not have the authority to limit or interfere with the respective Member's rights and authorities over their own internal matters, including, but not limited to, a Member's legal rights to surface water supplies and assets, groundwater supplies and assets, facilities, operations, water management and water supply matters. The Members make no commitments by entering into this Agreement to share or otherwise contribute their water supply assets as part of the development or implementation of a GSP.

6.2 Noncompliance. In the event any Member (1) fails to comply with the terms of this Agreement, or (2) undertakes actions that conflict with or undermine the functioning of the Authority or the preparation or implementation of the GSP, such Member shall be subject to the provisions for involuntary removal of a Member set forth in of Section 6.3 of this Agreement. Such actions of a Member shall be as determined by the Board of Directors and may include, for example, failure to pay its agreed upon contributions when due; refusal to participate in GSA activities or to provide required monitoring of sustainability indicators; refusal to enforce controls as required by the GSP; refusal to implement any necessary actions as outlined by the approved GSP minimum thresholds that are likely to lead to "undesirable results" under SGMA.
6.3 Involuntary Termination. The Members acknowledge that SGMA requires that multiple GSAs within Bulletin 118 groundwater basins designated as high- or medium-priority must coordinate, and are required to use the same data and consistent methodologies for certain required technical assumptions when developing a GSP, and that the entire Basin must be managed under one or more GSPs or an alternative in lieu of a GSP for the Basin to be deemed in compliance with SGMA. As a result, upon the determination by the Board of Directors that the actions of a Member (1) fail to comply with the terms of this Agreement, or (2) conflict with or undermine the functioning of the Authority or the preparation and implementation of the requirements of the GSP, the Board of Directors may terminate that Member's membership in this Authority, provided that prior to any vote to remove a Member involuntarily, all of the Members shall meet and confer regarding all

matters related to the proposed removal. The Board of Directors shall terminate the membership in the Authority of any Member that fails, on or before June 30, 2017, to (i) elect to become a GSA duly established in accordance with SGMA, or (ii) participate, through a joint exercise of powers agreement or other legal agreement, in a GSA duly established in accordance with SGMA.

Emily Honn

From: Mary Elizabeth <mebeth@outlook.com>
Sent: Tuesday, May 14, 2019 6:22 AM
To: Ara Marderosian; Colin@ejcw.org; barbara@Restorethedelta.org; gbigler@puentesca.org; machadofamilyfarms@gmail.com; goldrushdean@yahoo.com; Dfries.audubon@gmail.com; jgiordano@thewinegroup.com; Mooovers@aol.com; Hildfarm@gmail.com; gvhlaw@gmail.com; michael.machado@ymail.com; ryan.mock@simplot.com; jpruitt@ccstockton.org; wprice@pacific.edu; daryllpq@gmail.com; jennifer@mccv.org; blancapaloma@msn.com; mike@springcreekcc.com; LTurkatte@sjcehd.com; kensvogel@yahoo.com; twells@tfewines.com; jlambie@e-purwater.com; joelm@ccwd.org; zenet.negron@asm.ca.gov; andrew@latinotimes.org; tcurtis@sewd.net; Brent@bartonranch.com; ypark@cafecoop.org; HDanielson@BoethingTreeLand.com; Paul.Wells@water.ca.gov; bnakagawa@sjgov.org; janetyack@me.com; Alyson Watson; Christy Kennedy; Lindsay Martien; lucy@lucycompanypr.com; cindy@lucycompanypr.com; aconnelly@sjgov.org; krvillalpando@sjgov.org; mcallahan@sjgov.org; dbarney@sjgov.org; Todd Shuman
Cc: Jane Wagner-Tyack; Mother Lode Chapter, Delta-Sierra Group ExCom
Subject: UCS UCD Water and Climate Meeting 5.22.19 6-8pm
Attachments: UC Davis Water Climate Policy Reception 22.pdf

Hello,
I received notice of an evening meeting at UCD May 22, 2019. Here is an excerpt of the attached flyer:
California's water management system is already failing more than one million residents who lack access to safe drinking water. Climate change and an increasing population will only further stress the system. And while new public policy requiring groundwater sustainability, subsistence flows, and increased stakeholder engagement offers the opportunity for Californians to reshape their water management landscape, it also presents additional challenges.
California's changing conditions will require experts and practitioners to break out from their silos and work together to implement interdisciplinary and cross-sectoral solutions. Come meet other experts, graduate students, and practitioners working at the intersection of water, climate, and policy, and learn about opportunities to collaborate and apply your skills to build a more resilient water future for California.

Anyone interested in carpooling from Stockton? Refreshments will be served.
I have RSVP'd.
No Fillmore but two more possibilities for hope.
Peace,

Mary Elizabeth

From: Ara Marderosian <ara@sequoiaforestkeeper.org>
Sent: Monday, March 25, 2019 8:55:00 AM
To: Colin@ejcw.org; barbara@Restorethedelta.org; gbigler@puentesca.org; machadofamilyfarms@gmail.com; goldrushdean@yahoo.com; mebeth@outlook.com; Dfries.audubon@gmail.com; jgiordano@thewinegroup.com; Mooovers@aol.com; Hildfarm@gmail.com; gvhlaw@gmail.com; michael.machado@ymail.com; ryan.mock@simplot.com; jpruitt@ccstockton.org; wprice@pacific.edu; daryllpq@gmail.com; jennifer@mccv.org; blancapaloma@msn.com; mike@springcreekcc.com; LTurkatte@sjcehd.com; kensvogel@yahoo.com; twells@tfewines.com; jlambie@e-purwater.com; joelm@ccwd.org; zenet.negron@asm.ca.gov; andrew@latinotimes.org; tcurtis@sewd.net; Brent@bartonranch.com; ypark@cafecoop.org; HDanielson@BoethingTreeLand.com; Paul.Wells@water.ca.gov; bnakagawa@sjgov.org; janetyack@me.com; awatson@woodardcurran.com; cskennedy@woodardcurran.com; LMartien@woodardcurran.com;

lucy@lucycompanypr.com; cindy@lucycompanypr.com; aconnelly@sjgov.org; krvillalpando@sjgov.org; mcallahan@sjgov.org; dbarney@sjgov.org; Todd Shuman
Subject: ESJ Groundwater Sustainability Workgroup - REPORT 89% of CV water flowing into San Francisco Bay was for salinity control to protect human uses of this water

New report: Delta water supply impacted by human use protections and capacity significantly more than endangered fishes
89% of Delta water flow into Bay was to combat salinity or due to water flows exceeding export capacity. Less than 1.5% related to Delta smelt.

From the Bay Institute, the San Francisco Baykeeper, and The Nature Conservancy:
https://mavensnotebook.com/2019/03/25/news-worth-noting-new-report-delta-water-supply-impacted-by-human-use-protections-and-capacity-significantly-more-than-endangered-fishes-feinstein-speier-to-epa-explain-reversal-of-redwood-city-s/

New findings published in the journal San Francisco Estuary & Watershed Science, reveal that water exports from the South Delta were limited by infrastructure and water quality concerns far more often than protections for endangered species. During the 2010-2018 study period, 89% of Central Valley water flowing into San Francisco Bay was the result of salinity control and infrastructure constraints on water exports compared to less than 1.5% caused by endangered species act safeguards specific to protection of Delta smelt from entrainment in the export pumps.

"Safeguards for the San Francisco Bay estuary's six endangered fish species led to relatively small increases in freshwater flow to the Bay," said Greg Reis, staff scientist for The Bay Institute and lead author of the research article. "In two of the nine years we studied, protections for Delta Smelt did not limit water exports for even a single day — the effect on water supplies of protecting this unique species, which functions as an indicator of overall ecosystem health, is far less than what's commonly reported."
Reis added, "Most of the water flowing out of the Delta to San Francisco Bay exceeds system capacity in wet years, and in dry years is needed to keep salt away from Delta farms and state and federal export pumps in order to protect human uses of this water."

Analyzing long-term trends regarding the factors that governed water export facilities in the Delta, researchers from The Bay Institute, The Nature Conservancy, and San Francisco Baykeeper found that data do not support the much-publicized narrative of fish vs. farmer which significantly overstates how much endangered species regulations have impacted the amount of water that is exported from the Delta.

"Despite water quality regulations that are intended to protect fisheries and wildlife populations in general, and endangered species act protections for the most imperiled fishes, the proportion of Central Valley river flows that make it all the way to San Francisco Bay has

been declining for decades," said Dr. Jonathan Rosenfield, Senior Scientist at San Francisco Baykeeper and co-author of this study. "Currently, Californians divert, on average, about 1/2 of the ecologically critical winter-spring runoff that would otherwise flow into San Francisco Bay, and the fish, wildlife, and water quality that rely on this water are suffering as a result."

For years the narrative of water usage in the Delta has been driven by the contention that water use by agriculture was being limited by environmental regulations. But, access to data regarding those claims has been extremely challenging. Though data were publicly available, the data were scattered in various locations, often in ad-hoc fashion without context, which led to misinformation being inadvertently amplified.

Improved access to, and clear context for, data presented by state and federal agencies is critical to preventing unfounded claims from filtering into government water policy.

"Given the ongoing conversation, it was surprising to see how low the numbers actually are," said Dr. Jeanette Howard, Director of Science, at The Nature Conservancy's California Water program. "But, what this study clearly shows is that we need more transparency and public access to data when it comes to understanding our water in California. As temperatures rise and we see wider swings between wet and dry seasons across the state, we need to base our decisions around usage of this critical resource in reality."

Between 2010 and 2018, exports were limited to maintain salinity standards for human water use on 29% of days, roughly the same frequency as that required for protections of the Bay's six endangered fish species. Often overlooked in the rhetorical battle over environmental protections, exports were constrained by infrastructural constraints (including full storage reservoirs, required system maintenance, or because the export system had met capacity) on 1 of 6 of days, including 59% of days in water year 2017.

In 2014 and 2015, the driest years of the study, the contrast was especially stark. Salinity control led to export constraints on 62% and 56% of days, respectively, while exports were not cut short to protect Delta smelt on any days. In 2011 and 2017, the wettest years studied, infrastructure and hydrologic limitations constrained project water exports on 49% and 59% of days, respectively.

Researchers also looked at how much freshwater flows from the Central Valley watershed to San Francisco Bay. The status of many fish and aquatic wildlife species depend on freshwater flows through the estuary during winter and spring. They found that the amount of freshwater runoff from the Central Valley that reaches San Francisco Bay has decreased significantly over time, even following implementation of new water quality regulations in 1995. The vast majority of the water flowing into San Francisco Bay over the past nine years was necessary to

control water salinity or exceeded export pump capacity, and all the water flowing to the Bay helped maintain water quality for human consumption.

Ara

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ELLEN HANAK: Water and the Future of the San Joaquin Valley

May 29, 2019 Maven Conferences and Seminars

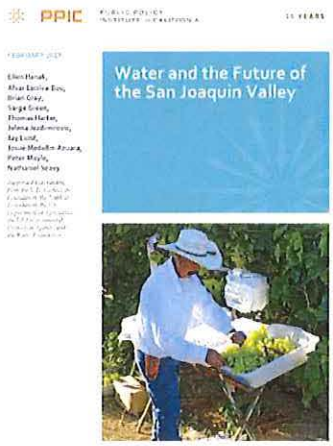
Ellen Hanak delivers four priorities for managing the implementation of SGMA in the San Joaquin Valley

The San Joaquin Valley is California's largest agricultural region and an important contributor to the nation's food supply, producing more than half of the state's agricultural output. Irrigated agriculture is the region's main economic driver and predominant water user.

However, the San Joaquin Valley is at a pivotal point. It is ground zero for many of California's most difficult water management problems, including groundwater overdraft, contaminated drinking water, and declines in habitat and native species. The Valley has high rates of unemployment and pockets of extreme poverty, challenges that increase when the farm economy suffers.

The Sustainable Groundwater Management Act requires local water users to bring their overdrafted groundwater basins into balance by the early 2040s. With the largest groundwater overdraft in the State, the implementation of SGMA will have a broad impact on Valley agriculture in coming years, and will likely entail fallowing of significant amounts of farmland.

"Water and the Future of the San Joaquin Valley" is the third installment of a research project by the Public Policy Institute of California (PPIC) Water Policy Center on solutions to the San Joaquin Valley's water challenges. Ellen Hanak is director of the PPIC Water Policy Center and a senior fellow at PPIC. At the May meeting of the California Water Commission, she discussed the findings of their research and recommendations regarding the challenges facing the San Joaquin Valley.



Ms. Hanak began by noting that the San Joaquin Valley is really at a pivotal moment. More than half of the agricultural output of the state comes from the San Joaquin Valley. "*From a farming perspective, that carries through to the economy in a lot of respects*," she said. "*In 2015, we estimated that if you add together the Valley's crop, livestock, and processing revenues and value added, it was almost 25% of the regional economy.*"

The implementation of the Sustainable Groundwater Management Act (SGMA) and bringing water supply and demand into balance has to be done in conjunction with addressing water quality challenges, among other related things. "*A lot is at stake for the economy, for public health, for the environment*, she said. "*The bottom line is*

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that we found that there are a lot of promising approaches that allow folks to manage the scarce water resources most effectively and to manage and steward water on lands more flexibly. It's not a command a control approach as much as providing incentives for landowners and farmers in particular who are going to be on the frontline of this to make decisions that are beneficial to their bottom line but also more broadly."

It also means looking for approaches that leverage multiple benefits such as a recharge area that's also a wildlife area or a project that can manage water quality and water supply together.

Cooperation and coordination among stakeholders in the Valley will be key; there isn't a farm-by-farm solution that will really make this work, she said. "*What we emphasize is that the solutions really need to come from leadership in the Valley, but the state and federal governments can be very important in providing vital assistance. It's not just funding but also a regulatory framework to help encourage folks to do things that are most beneficial.*"

SGMA IMPLEMENTATION IN THE SAN JOAQUIN VALLEY

Implementation of the Sustainable Groundwater Management Act is a major focus of the water user and water management community, she said. All groundwater basins considered high or medium priority (shown in orange and yellow on the map) need to comply with SGMA.

"*The San Joaquin Valley is really ground zero in terms of getting first of the gate with getting the plans done*," Ms. Hanak said. "*Public review drafts of these plans are starting to make their way out into the public and they have to be delivered to DWR*

Sign me up!

UPCOMING EVENTS

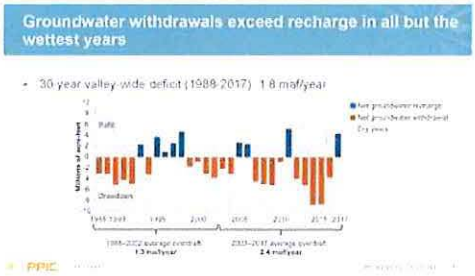
MAY 30 Thu

10:00 am Water Storage Investment Program... @ California Secretary of State Building (https://cawaterlibrary.net/event/homemeetings water-storage-investment-program-informational-meeting-administration-of-public-benefits-water-storage-investment-program-informational-meeting-administration-of-public-benefits/?instance_id=5728)

by the end of January of 2020 and implementation needs to start at that point. Folks are going to have about 20 years to achieve sustainability but they've got to meet milestones along the way and they have to make sure they are not causing significant undesirable impacts in the meantime."

In order to achieve this balance, the GSAs must either add to supplies or reduce demand (meaning use less water), and for most basins, it's probably going to be a combination of those two things, she said.

Groundwater withdrawals exceed recharge in all but the wettest years. On the chart, the years where pumping exceeds recharge are shown in brown and below the line; the years in blue are the years when



3:00 pm SGMA Survival Toolkit: What farm... @ Exeter Veterans Memorial Building (https://cawaterlibrary.net/event/sgma-survival-toolkit-what-farmers-can-do-to-prepare/?instance_id=5731)

MAY 31 Fri

all-day Last day for bills to be passed ... (https://cawaterlibrary.net/event/last-day-for-bills-to-be-passed-out-of-legislative-house-of-origin/?instance_id=5461)

7:30 am OC Water Summit: Water under the... @ Disneyland Grand Californian Hotel & Spa (https://cawaterlibrary.net/event/oc-water-summit-water-under-the-microscope/?instance_id=5635)

JUN 4 Tue

all-day Integrated Water Flow Model (IWF... @ West Yost Associates Training Room

recharge exceeded pumping.

"*The objective is not to make groundwater use the exact same in every year; it's to move that line down so that there are more blue years and that way it balances out, so it is available to use more intensively in dry years*," she said. "*That's a very important drought reserve for the Valley.*"

Also happening concurrently is the implementation of water quality laws and regulations relating to groundwater. "*In this regard, California is in some respects ahead of the nation as a whole because the federal laws on water quality don't address groundwater quality to the same extent that our Porter Cologne does*," Ms. Hanak said. "*There has been over the last maybe 12 years or so, various regulations that are especially related to agriculture and groundwater management; there's been a dairy order that relates to groundwater quality, also the Irrigated Lands Regulatory Program and the CV-SALTS program.*"

She noted that the CV-SALTS group initially got together to deal with long-term salinity issues and then took on the issue of nitrate, a long-term contaminant that's very important from a drinking water perspective. That group proposed a regulatory framework to address providing safe drinking water and the need to manage long-term pollution, both nitrogen loading and the salt balance;

(https://cawaterlibrary.net/event/integrated-water-flow-model-iwfm-version-2015-training/?instance_id=5674)

9:00 am Camp Fire Water Resources Monito... @ California State University, Chico Farm (https://cawaterlibrary.net/event/camp-fire-water-resources-monitoring-and-research-symposium/?instance_id=5729)

9:30 am State Water Resources Control Board @ Cal EPA Headquarters (https://cawaterlibrary.net/event/state-water-resources-control-board-78/?instance_id=5303)

1:00 pm WEBINAR: WOTS Up? An Update Reg... (https://cawaterlibrary.net/event/webinar-wots-up-an-update-regarding-regulation-of-wots-and-wotus/?instance_id=5718)

that ended with a Salt and Nitrate Control Plan that the regional board adopted last year about this time, which is going to for a yea/nay vote at the State Water Board soon.

"*The idea of this approach is to look at it comprehensively, and in the very near term, provide safe drinking water solutions while managing the longer term challenges*," she said. "*I highlight this because there are some potential synergies with bringing water supplies and demands into balance but also some potential trade-offs.*"

Changes to water and land present new challenges and new opportunities for stewardship. Water will be more scarce as groundwater basins are brought into balance, and there's likely going to be irrigated cropland that will come out of production as part of the demand management equation that will need to be managed in some way.

"*There's obviously a lot of interest in reducing the need to manage demand, but then also that there's likely going to be some land that comes out of production*," she said. "*It will be important to manage that so it's not causing public health problems from dust, it's not causing problems for neighboring farmland from pests and weeds, and also, it will be important to find ways that it can generate some value for the economy. That's where thinking about these multi-benefit approaches really comes*

1:30 pm Sustainable Groundwater Manageme... @ Natural Resources Building (https://cawaterlibrary.net/event/sustainable-groundwater-management-grant-program-public-meeting-sacramento/?instance_id=5705)

JUN 5 Wed all-day Second Annual Groundwater Sustai... @ Radisson Fresno (https://cawaterlibrary.net/event/second-annual-groundwater-sustainability-agency-summit/?instance_id=5259)

Click here to view the full calendar of events

in, how to steward the soils so that can generate value, potentially even with carbon credits as well as for healthy farmland. Habitat, solar, recharge, flood protection, recreation – there are a lot of different potential opportunities that need to be thought through."

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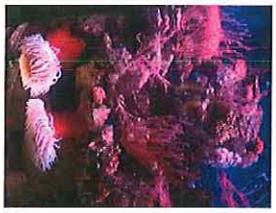

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FOUR PRIORITIES FOR ACTION

PRIORITY 1: Balancing water supplies and demands

The PPIC study looked at overall water balance and what was the gap that needed to be met and considered a range of options.

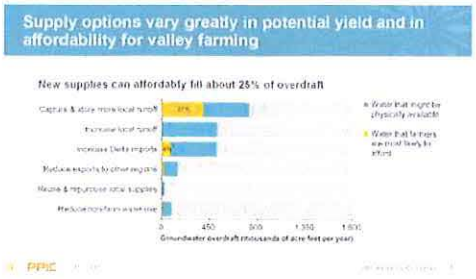
"*That donut shows you what the gap is*," said Ms. Hanak. "*The groundwater overdraft we estimated over those 30 years is about 11% of total net water use, so the task is either making some of that red blue with some new supplies, or shrinking the size of the donut to get rid of that overdraft.*"

For the urban communities, the researchers determined that even in this fast growing region, urban demand could potentially be managed through conservation. "*We've already seen some significant net water savings since the outset of the drought and with the state's new requirements on water conservation, it just shows that in the*

scheme of things, that's a potential way to go," she said. "*We expect that urban communities will probably want to be co-investing in supply projects as well.*"

Their research focused on what's affordable for agriculture; everything listed in red on the slide above are things they examined in some detail.

On the supply side, they looked at studies that had quantified how much water could be made available potentially and at what the cost range. The chart shows the results, with the blue bar representing the best maximum physical potential for getting new water out of these different sources, based on the studies; the yellow is the likely amount that farmers would be willing to pay, based on what would be profitable for farmers in their business, because water in agriculture is a business input.



"*We took into account the uncertainties, and what we found is that there are some options, but a lot of them are pretty expensive*," she said. "*There are limits to how much you'll pay before you're not making money off of the water, and that sweet spot is about $300-500 an acre-foot. Beyond that, it gets pretty expensive for long-term investments for farmers.*"

The researchers found that the most potentially available water at the most reasonable cost is capturing and storing more local runoff. "*That is water within the greater watershed that is not currently captured during high flow events and that's not currently needed by somebody else downstream or the environment*," Ms. Hanak said.

They considered the different ways water could be acquired for recharge, including surface storage projects such as Temperance Flat and reoperation of the existing system to optimize how groundwater and surface water work together. She noted that Temperance Flat comes out kind of expensive, not so far out of the realm of possibility that folks would never want to invest in it, she said, but it's on the high side compared to what recharge investments seem to cost.

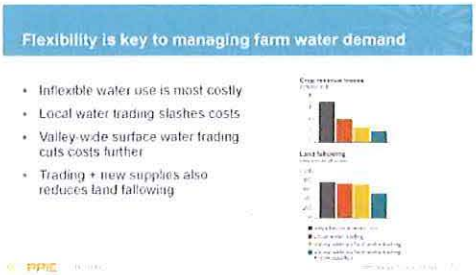
Increasing local runoff by managing the headwaters and the forests differently could potentially yield a significant amount of water, but it's only for water supply, it's very expensive, she said. "*The average price estimated was about $4500 an acre-foot*," she said. "*That does not mean it's a bad idea to do it; it's just that water cannot be the main investor in this. It could be a co-benefit. You really need the other beneficiaries to help pay for that to make it happen.*"

They also considered ways to increase water imported from the Delta, looking at Water Fix, Shasta, and Sites as well as system reoperation. "*What we found are the big projects are expensive for Valley ag, and that's why you don't see too many folks lining up with their checkbooks for those projects at this point*," she said. "*That is taking into account the money that the state and federal governments have committed to these projects which includes Prop 1 cofunding, but those projects still require beneficiaries to pay. What we find is that a bit of Delta imports could be increased through reoperation, or managing the entire Central Valley system together.*"

A lot of folks are interested in water reuse and recycling, but Ms. Hanak said there's not much potential for expanding that as most recycled wastewater is already spread on the ground in this region and the water that goes into rivers is pretty much spoken for, so while there may be some potential for optimizing where its used, but it's not a net big increase in supply.

"*Overall, about a quarter of the supply gap can be met through new supplies, so that means about 75% in our estimate will need to be met through managing demand on the ag side*," she said. "*That can be done somewhat through crop shifting but mainly by taking land out of production. This is not a solution where irrigation efficiency can get you much bang for the buck because it doesn't really reduce the net water use of crops and actually sometimes increases it.*"

Flexibility will be key to managing farm water demand to minimize economic impacts. "*What we looked at is inflexible water management versus flexible water management*," she said. "*This means trading and allowing water to be used on the most productive fields and crops.*"



The top chart on the slide shows crop revenue losses, with the brown bar on the left showing crop revenue losses with completely inflexible water use, meaning a proportional reduction across the board; that would generate losses

of $3.5 billion dollars a year in crop revenues relative to today's conditions, she said. The rust colored bar shows the crop losses with water trading within the basin, both surface water trading and groundwater trading. The yellow bar shows crop losses with valley-wide trading. The green bar shows crop losses with valley-wide trading and new water; she noted that this reduces the cost to about 1/3 of the costs than with inflexible water use, all for the same amount of water.

"*That's what we consider the sweet spot from the point of view from the ag economy and the regional economy and that gets you down to 25% of the costs*," said Ms. Hanak. "*That's the one that makes a big difference on that bottom graph which is land fallowing; that can reduce the amount of land fallowing from about 750,000 acres to a little bit over 500,000.*"

A portfolio approach can minimize the economic losses. She presented a slide showing revenue losses, GDP losses, and job losses by ag sector. The green color on each bar represents crops; the red are dairy and beef impacts, and the yellow is processing; the things on the revenue side carry through to GDP, which is the real value generated in the Valley, and also job losses.

"*The higher value crops also tend to have more jobs, so it's important, not just for farmers bottom line, but for thinking about the regional economy and employment*

more generally," she said.

A glide path or gradual ending of overdraft can be important from the standpoint of economic adjustments as long as people do it in a way that takes care of mitigation of some of the key issues, such as subsidence and drinking water wells.

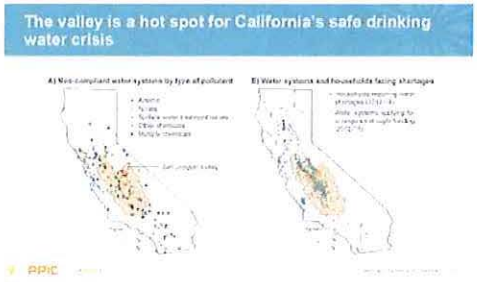
Recommendations

Ms. Hanak acknowledged that more analysis needs to be done on where the smart infrastructure investments are, and more analysis needs to be done on how much water is available for groundwater recharge. "*There are ways that state and federal agencies can improve the process for approving trading and banking to make that more streamlined, and a fair number of things that folks have to do at the local level to incentivize recharge on farmland*," she said. "*Fair and equitable and transparent local water trading rules need to be developed, and then figuring out how folks are going to coordinate, and not just at the GSA level – it has to go up to the basin level and across basins to really maximize benefits*."

Recommendations for balancing water supply and demand

1. Assess infrastructure needs, modernize operations
2. Incentivize recharge on farmland
3. Develop local water trading rules
4. Clarify how much water is available for recharge
5. Facilitate approvals for trading and banking projects
6. Coordinate to maximize benefits

PRIORITY #2: Ensuring safe and reliable drinking water.



The Valley's really a hot spot for California's overall safe drinking water crisis, Ms. Hanak said. She presented a slide with two maps on it. The map on the let shows all the water systems that were out of compliance with water quality standards; over half are in the Valley. There are a range of contaminants with nitrate and arsenic being the most common ones; about a quarter of these systems have multiple contaminants that they need to address. She acknowledged that 123 TCP is not shown, which is a new regulation, and a lot of systems are out of compliance for that.

"*This is a big issue*," she said. "*Most of the systems are quite small. Most have been out of compliance for over 3 years, so it's chronic ongoing and without a fix*."

The map on the right of the slide shows the systems and wells that were affected during the drought; the orange dots are water systems that applied to the state for emergency funding, about half of them in the San Joaquin Valley. The blue dots are the domestic wells and very small systems that ran out of water; almost 80% of those were in the valley, which is likely underreported because it was self-reported.

"*These supply vulnerabilities need to be considered in conjunction with the water quality issues, because some of the places that have quality issues are also vulnerable from a supply perspective*," she said.

Recommendations

Ms. Hanak said that even though locals have to be really driving a lot of this change and providing the support for on the ground solutions, the state has to take a lot of leadership. The solutions include not just funding, but also technical and managerial solutions on the ground. She also noted that if groundwater sustainability plans don't have some guidance on how they are going to mitigate for dry wells, they probably should be sent back to get fixed.

Recommendations for ensuring safe drinking water

Recommendations for ensuring safe drinking water:

1. Consolidate, aggregate systems
2. Provide technical support
3. Plan for shortages and mitigate dry wells
4. Ensure funding

PRIORITY #3: Managing groundwater quality for the long-term

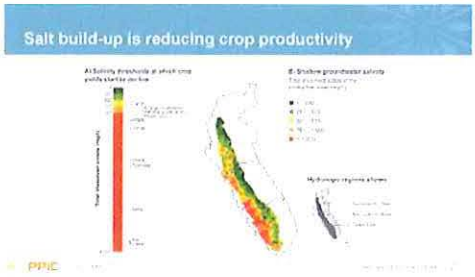
There are long-term nitrogen and salt issues which need to be addressed. "*Any time you are applying fertilizer in basins that already have very high nitrogen levels, you're going load nitrogen*," Ms. Hanak said. "*One of the regulatory challenges is figuring out how to allow agriculture to still continue, encourage reduction in loading, and figure out ways to improve that over the long-term. This is true across the board with inorganic fertilizers and chemical fertilizers.*"

Dairies face special challenges, because it's easier to become more efficient in the application of fertilizers than it is manure, which is largely used by dairies, she said.

The map highlights special challenges dairies face, both because the manure is harder to manage effectively on the farm and because there is too much manure relative to dairy cropland. The map on the left shows the dairy cropland which is about 6% of all the land in the valley and the map on the right shows the nitrogen loading hotspots; anything in yellow is higher than it should be from a health perspective.

"*The real hotspots that are off the charts in terms of the numbers align really closely with the dairy lands and that's because there's a lot of manure to manage so folks are looking for solutions and one big part of the solution is getting the manure off of the dairy lands and finding ways to monetize that and make it useful as a resource elsewhere*," she said.

Salt build-up is reducing crop productivity, especially on the west side of the valley. The salt accumulates because when there's salt in the water, crops don't use the salt, they use the water and leave the salt behind. Whereas nitrogen is a drinking water issue, salt is really an ag productivity issue. Many of the more profitable crops are more salt-sensitive, so farmers have been adjusting their agronomic practices and by crop shifting, but already about 250,000 acres of land has been taken out of

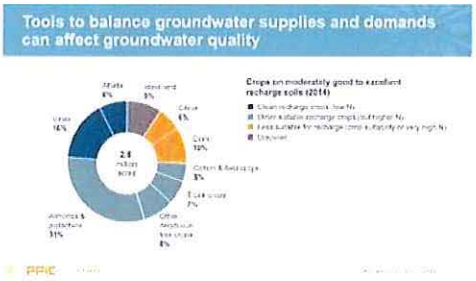


production because of salt buildup and another estimate 1.5 million acres that are salinity impacted.

"*It's likely some of these lands are going to come out of production over time because the solutions are very expensive to make the salt go away by exporting it, desalting it, and so on*," Ms. Hanak said. "*We highlight this as an opportunity for really thinking together about water quality and water supply and encouraging that if lands are going to come out of production, that that water can go to more productive land, so that it's not disjointed decisions between water supply demand balance and managing salt.*"

With respect to groundwater recharge in relation to water quality issues, Ms. Hanak pointed out that while it is one of the most cost-effective ways of adding to supplies, you need to be mindful of the water quality implications. The valley has a lot of very suitable land for recharge; they estimated based on the UC Davis soil maps that in 2014, about 2.8 million acres of the irrigated cropland in 2014 was suitable or at least moderately good for recharge in the valley. However, only about a quarter of that land is in alfalfa or vines which don't have a lot of nitrogen fertilization applied; some of that land isn't suitable because the crops are not suitable (such as citrus) or because the land has had dairy manure applied.

"*The key issue is figuring out how to manage recharge on the lands that are shown in green*," Ms. Hanak said. "*Those are crops that can handle recharge from an agronomic perspective, but where they do use nitrogen fertilizers, so thinking about how to manage that in ways that are compatible. For example, maybe not applying fertilization in the fall to make it possible to recharge in the winter, those are calls farmers will have to make, but also thinking about the regulatory framework to in some cases maybe allow things to get worse in terms the water pushing nitrogen down into the water table with the plan that it will get better overtime as more water is applied to that.*"



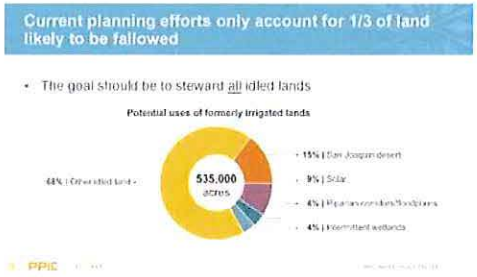
Recommendations

"*On the ground folks are going to have to manage water quality and quantity together*," she said. "*There are some synergies there but also some trade-offs to consider. New technologies are going to be important, and then providing the regulatory flexibility to manage these long-term pollutants flexibly so we get the best overall outcomes is going to be an important piece. We think that the Salt and Nitrate Control Plan could accommodate this flexibility, even though it hasn't been an active part of the discussion yet.*"

Recommendations for managing water quality over the long-term

1. Coordinate water quality and quantity management
2. Implement new technologies to manage pollutants, especially for dairies
3. Provide regulatory flexibility to manage nitrogen, salt loading

PRIORITY #4: Fostering beneficial water and land use transitions



A significant issue is what to do with land that's likely to come out of production. The donut diagram shows the lower bound estimate for how much land might come out of production of about 500,000 acres.

The different colors show the kinds of uses that are already being considered: The San Joaquin desert ecosystem recovery plan envisions 80,000 acres or 15%; about 9% could potentially go to solar as part of the broader efforts to expand solar energy; and the smaller blue-green slices are expansion of riparian corridors and intermittent wetlands, which are essentially recharge basins managed for wildlife as well.

The big yellow piece, about two-thirds of the total is what would be leftover if only what was planned moved forward. "*This just shows you that the total amount that*

we're looking at is bigger than what's already been imagined for these other pieces," she said. "*It's not to say nothing can happen there. There's potential for stewarding of all of these lands, some of it as permanent retirement but some of it as rotationally fallowed lands where one is managing for soil health and doing carbon capture during those periods that can be good from a water retention standpoint. We think that those different approaches thoughtfully done can bring in revenues, including USDA, CDFA funding, greenhouse gas emissions, and other programs that bring in revenues for that.*"

Recommendations

There needs to be broad-based inclusive planning beyond the level of the GSA and at a regional level. The state and feds can play key roles by providing more flexible regulatory approaches for doing restoration at the bigger scale such as habitat restoration plans to make it easier for landowners, and to incentivize landowners to do things in the right places and the right ways. Boosting technical support and R&D will also be key.

Recommendations for fostering beneficial water and land use transitions

1. Initiate broad-based, inclusive planning
2. Implement flexible regulatory approaches
3. Provide financial incentives
4. Boost technical support, R&D

HOW CAN THE STATE BE MOST HELPFUL NOW?

"*Number one is ensuring a robust comprehensive framework for safe drinking water solutions, and this not just financial, it's also the technical and managerial*," she said. "*The second is that now we're entering the next phase of SGMA where we're going to be in the first five years of plan implementation. A lot of the work that has been done so far is just getting some basic numbers together and some really basic concepts about how folks are going to manage. Now the proof is going to be in the pudding in terms of what kinds of projects and actions are going to be possible. The state can really play a major role in getting the regulatory program, clarity, consistency among regulations, flexibility, and then supporting locals in some of these other areas, such as assessment of smart infrastructure investments, supporting pilot efforts for folks that are willing to take some risks and try these on the ground, technical support and R&D, and supporting broad based planning that's led by folks in the region*."

Recommendations for state action

Ensure a robust, comprehensive framework for safe drinking water solutions

- Financial, technical, managerial

Support the region's transition to groundwater sustainability

- Regulatory clarity, consistency, flexibility
- Assessment of smart infrastructure investments
- Pilot efforts for innovative approaches on the ground
- Technical support, R&D
- Broad-based planning, led by the region

DISCUSSION PERIOD

"*When we talk about improving watershed health which has the potential outcome for improving water capture and water quality improvement, it also improves fire reduction and also has an impact on soil health and carbon sequestration so there are multiple benefits there*," said Chair Armando Quintero. "*One of the things that I think about is who is going to pay for this. I really think we have got to get all Californians realizing that we all have to invest in all of California. All of our urban centers are dependent on the Sierra watersheds, and there's a disconnect between the folks at their faucet and these incredible water basins, and so I'm really interested in seeing us as a water focused community making the case that this requires everybody's investment. And it has to be significant*."

"*When you talk about technical support and R&D, one of the things that the state can do on a statewide basis that facilitates local decision making is real-time and accurate information systems, in terms of where is water in the system and what are we actually going to see come down the hill*," continued Chair Quintero. "*For all of the water users in the state, to have the best information possible to make decisions that can be implemented a few months away, knowing what's coming down the hill, which involves so many things, what's the soil moisture look like, what was the precipitation that year, what's the vegetation look like – all of those things. So it seems to me that one thing we need to do as a state is put in robust information systems that are accurate and allow for early decision making*."

Chair Quintero said capturing water is important as well. "*One of the big questions to me is where do we capture water and it seems like one of the things that we have to do as a state is provide really good land and recharge maps for each of these big basins … I don't really know if we have that now*."

"*The initial work led by UC Davis soil lab has been important for people as a first start*," said Ms. Hanak. "*Now there's work being done both from a team at Stanford*

and also at Davis on trying to hone that and find the very high potential areas, such as the connectivity underground or former riverbeds to really maximize that. You're also starting to see this on the ground with growers who are experimenting with this too. They have the general maps too but they are looking at where does water really percolate well, but yes, I think we have a basis for making some decisions now but we can improve that information."

"*One of my concerns with SGMA is that it seems that we have to develop the technology to also be able to in real time and accurately understand what's happening with the water quality underground,*" said Chair Quintero. "*As we recharge aquifers that have been drawn down, it's sort of a different environment in there than the water that was there before. My understanding is that when you dry out soils in an aquifer and then you recharge of it, the combination of the ingredients that are in the water, whether it's fertilizers or other contaminants or other chemicals and things that are in the water, it seems that we have to really keep an eye on making sure that those water basins are kept healthy.*"

"*I'll just start by saying a lot of them are not,*" said Ms. Hanak. "*Sometimes recharge, if there's stuff sort of in the vadose zone and root zone, the recharge initially might push some of that through faster than it would happen under normal conditions, but colleagues on my team including Thomas Harter are optimistic that actually the floodwaters coming in from the Sierra is a pretty clean source of water so that has the potential overtime to improve water quality. The issue is more, if you're impatient and you want it improved by next year, that might not be a realistic expectation. Their thinking is that that can be helpful also with the salinity issues, too, depending how you're going to get that to the land and manage that.*"

Commissioner Carol Baker asked if the study looked at existing laws and regulations and whether or not there are areas where the law can either be improved to help

move these issues forward and where maybe we have to start from ground zero?

"*We go into some detail in the main report on some of the legal and regulatory issues relating to especially groundwater recharge issues and some water trading issues,*" said Ms. Hanak. "*Our philosophy is we first look at what can you do within existing law, and the answer is usually much more than we're doing. And so then that speaks to, are there ways in which regulations could be applied differently or we're not taking advantage of opportunities we already have.*"

"*On the recharge issue, there's been some debate over whether there is a need for statutory change on whether recharge is a beneficial use,*" continued Ms. Hanak. "*Brian Gray who is the legal expert on our team has been coming down on the side of that it probably isn't needed; it may be helpful for certain things. But what's really key is getting to a place where the decision could be made quickly on how much water folks can divert for recharge when its available because it comes fast and furious when it does, and that there's a lot of potential already within the law and the State Board's purview for that. Which is not to say, sometimes legal changes can help to give the agencies a nudge or affirm that yes this is something that is important to us and assisting in interpretation.*"

"*Another example is on the water quality side where what we think is actually the new salt and nitrate control program provides some important flexibility that the region is going to need to manage these issues,*" Ms. Hanak said. "*It's a matter of just using that flexibility in a responsible way. On the question of habitat management, we point out there are a lot of things right now that are available that aren't used that much. That includes habitat conservation plans, NCCPs which is the state equivalent, Safe Harbor, and those kinds of things, so there's potential for us to try to find ways to do more. That doesn't mean that the legislature should never have anything to do, but they are not the ones holding us up.*"

"One area where I'll flag and I know this is an area that Commissioner Herrera has been very active on is on the safe drinking water side. We need legislation to figure out how we're going to fund safe drinking water."

FOR MORE INFORMATION ...

- For the agenda, meeting materials, and webcast link for the May meeting of the California Water Commission, click here.
- For the PPIC report, Water and the Future of the San Joaquin Valley, click here.

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Sustainable Groundwater Management (SGM)
GRANT PROGRAM

Planning Grants Proposal Solicitation Package – Round 3

May 2019

California Natural Resources Agency
Department of Water Resources
Division of
Integrated Regional Water Management

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FOREWORD

The California Department of Water Resources (DWR) is administering the Sustainable Groundwater Management (SGM) Grant Program Planning Grants using funds authorized by the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68) and the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1). This document is the Proposal Solicitation Package (PSP) for Groundwater Sustainability Plans (GSPs) and Projects.

This document is not a standalone document and the applicant will need to refer to the 2019 Proposition 68 SGM Guidelines (2019 Guidelines) for additional information. Potential applicants are encouraged to read the 2019 Guidelines, PSP, and grant agreement template prior to deciding to submit an application. The 2019 Guidelines and the grant agreement template can be found at the following link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater .

A glossary of terms used throughout this PSP are available in Appendix B (Definitions) of the 2019 Guidelines.

GRANT PROGRAM WEBSITE AND OTHER USEFUL LINKS

This document, as well as other pertinent information about the SGM, can be found at the following link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater.

Other useful links are identified below.

- Sustainable Groundwater Management Act (SGMA): https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=WAT&division=6.&title=&part=2.74.&chapter=&article=
- GSP Regulations: https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I74F39D13C76F497DB40E93C75FC716AA&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)%20
- GSP Regulations Guide: http://water.ca.gov/groundwater/sgm/pdfs/GSP_Final_Regs_Guidebook.pdf
- Disadvantaged Community (DAC) and Economically Distressed Area (EDA) Mapping Tools: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Mapping-Tools

E-MAIL LIST

In addition to the website, DWR will distribute information via e-mail. If you are not already on the SGM e-mail contact list, please use the following link to be added to the list: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater and click the "Subscribe" button in the upper right of the webpage.

CONTACT INFORMATION

For questions about this document, or other technical issues, please contact DWR's Financial Assistance Branch at (916) 651-9613 or by e-mail at: SGWP@water.ca.gov.

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LIST OF TABLES

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Acronyms And Abbreviations Used In This Proposal Solicitation Package

AWMP	Agricultural Water Management Plan
CASGEM	California Statewide Groundwater Elevation Monitoring
COD	Critically Overdrafted Basin
DA	Disadvantaged Areas
DAC	Disadvantaged Community
DWR	Department of Water Resources
EDA	Economically Distressed Area
GB	Gigabyte
GIS	Geographic Information System
GRanTS	Grants Review and Tracking System
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
IRWM	Integrated Regional Water Management
MHI	Median Household Income
PSP	Proposal Solicitation Package
SB	Senate Bill
SDAC	Severely Disadvantaged Community
SGM	Sustainable Groundwater Management
SGMA	Sustainable Groundwater Management Act
SWRCB	State Water Resources Control Board
SWRP	Stormwater Resources Plan
UWMP	Urban Water Management Plan

I. INTRODUCTION

DWR is administering the Sustainable Groundwater Planning Grant – Round 3 solicitation using funds authorized by Proposition 68 and Proposition 1 to encourage sustainable management of groundwater resources that support SGMA. This PSP contains specific information regarding the process, eligibility, and required content for grant applications for the Proposition 68 grant funds for the development of GSPs and projects that help to implement GSPs. DWR also issued the 2019 Guidelines that will be used to administer the grant solicitations and provide general information regarding program and eligibility requirements

SGMA was signed into law in 2014 and amended the Water Code §§ 10720-10737.8, inclusive. SGMA provides the framework for sustainable groundwater management planning and implementation. SGMA fosters sustainable groundwater management in California's designated high and medium priority groundwater basins or subbasins, hereinafter referred to as basins, by requiring local public agencies and Groundwater Sustainability Agencies (GSAs) to develop and implement GSPs or alternatives to GSPs (Alternative). The regulations for the evaluation of GSPs and Alternatives, the implementation of GSPs and Alternatives, and coordination agreements between GSAs and/or stakeholders are hereinafter referred to as the GSP Regulations. The GSP Regulations were approved by the California Water Commission on May 18, 2016 and are codified in the California Code of Regulations, Title 23, sections 350-358.4, inclusive. The SGMA text and GSP Regulations can be found at the links listed in the Foreword.

II. FUNDING

Proposition 68 authorized the Legislature to appropriate a total of $240 million to DWR for drought and groundwater investments to achieve regional sustainability (Chapter 11.6). Of this, $50 million is for projects that develop and implement groundwater plans and projects in accordance with groundwater planning requirements established under Division 6 (commencing with § 10000) (Water Code § 79775). After program delivery and bond issuance costs, $46.25 million will be made available for grant awards. In addition to Proposition 68 funding, approximately $1 million in Proposition 1 funds will be available for grant awards.

DWR will solicit proposals to award funding on a competitive basis to medium and high priority basins, including critically overdrafted (COD) basins, for tasks and activities that help to develop and/or implement a GSP(s). Eligible project types and eligible tasks are described further in Section III.B.

The minimum and maximum grant award amounts are listed below and are dependent upon whether the applicant has received previous funding from Proposition 1 Sustainable Groundwater Planning Grant Round 2 (Round 2) funds. If an applicant has received Round 2 funds, the minimum grant amount is $200,000 and the maximum grant amount is the difference between the total grant funds previously received from Round 2 and the new current maximum grant amount of $2 million (e.g., if an applicant received $1.5 million in Round 2, the maximum award amount for this applicant is $500,000). DWR reserves the right to award less than the maximum amount shown, but above the minimum amount.

Previously Awarded Applicant(s):
- Minimum Grant Amount - $200,000
- Maximum Grant Amount - Difference between previous awards and maximum award amount

New Applicant(s):
- Minimum Grant Amount - $400,000
- Maximum Grant Amount - $2 million per basin

A. Local Cost Share

A minimum match of 25 percent (%) of the project cost as local cost share is required unless the applicant received Proposition 1 funding. For those who will be funded using Proposition 1, the minimum match requirement is 50% of the total project cost as local cost share. Project expenses

must be incurred after May 18, 2016, (effective date of GSP Regulations), and not have contributed to the cost share of previous Proposition 1 awarded project, to be considered as local cost share. Local cost share must meet the conditions outlined in Section II.B. of the 2019 Guidelines and the definitions of "local cost share" contained in Appendix B of the 2019 Guidelines. The local cost share requirement for projects benefiting a severely disadvantaged community (SDAC), DAC, or EDA may be waived or reduced as shown in Table 1. For definitions of SDAC, DAC, and EDA, see Appendix B of the 2019 Guidelines. SDAC, DAC, and EDA will collectively be referred to as Disadvantaged Areas (DAs) within the 2019 Guidelines and the Planning PSP.

TABLE 1 – ELIGIBILITY FOR COST SHARE WAIVER

Percent Community(ies) that is/are DA	Required Minimum Local Cost Share Percent Proposition 68/Proposition 1
Less than 26%	25% / 50%
26% –50%	15%
51% – 75%	10%
76% – 100%	0%

DWR will use the information presented in the applications to evaluate whether the project provides benefits to a DA, as outlined in Table 1, to determine whether the required cost share is waived or reduced (see Appendix D of the 2019 Guidelines for additional details). The required local cost share percent and the cost share waiver granted, if any, will be identified in the grant award notification letter to the Grantee if the application is awarded. Additional information will be requested in the grant award notification letter if DWR cannot determine the eligible cost share waiver based upon the information provided in the application. The final determination of the cost share waiver for those that must submit additional information will be document prior to executing a grant agreement.

B. Eligible Costs and Payment

Eligible reimbursable costs are those that were incurred by Grantees after June 5, 2018 (when Proposition 68 was approved by voters), meets the conditions of "Eligible Costs" as outlined in Section V., and defined as "reimbursable costs" in Appendix B of the 2019 Guidelines. DWR's standard method of payment is reimbursement in arrears. Funds are disbursed after DWR approves the submittal of the DWR invoice form and required backup documentation by the Grantee. Grantees shall invoice and report on a quarterly basis. Additionally, DWR reserves the right to withdraw awarded funds due to lack of responsiveness on the part of the Grantee in submitting quarterly invoices and reporting and associated deliverables.

The standard method of reimbursement is called the Cost Share Drawdown, in which the Grantee must report all required local cost share (matching funds) funds for a budget category **before** reimbursement will be processed. Conversely, the Concurrent Drawdown method, in which the Grantee can request reimbursement and report local cost share funds, can be approved if the Grantee is a nonprofit organization representing DA or Tribe or if the Grantee can demonstrate a significant cash-flow need. See the 2019 Guidelines Appendix B for more information on reimbursement methods. Costs associated with the development of the GSA and the costs associated with development and submittal of a grant application are not eligible.

III. ELIGIBILITY

Applications for the Planning Grant solicitation must meet all applicable eligibility criteria to be considered for grant funding as described in the 2019 Guidelines, Section III. Additional eligibility requirements are described below and identified in Questions 4 through 9 in Table 4 – Grant Application Checklist, of this PSP. A comprehensive eligibility checklist is provided in Table 3 – SGM Planning Grant Eligibility Checklist (below) as a reference for applicants.

A. Eligible Applicant

Eligible applicants are GSAs or member agencies of the GSAs for the basin for which the application is submitted. Only one application will be accepted per basin. However, an applicant acting as the sole GSA over multiple basins must submit one consolidated application and may request up to $500,000 total for all additional basins, in addition to the maximum grant amount identified in Section II.

Applicants are encouraged to work with the stakeholder(s) and other non-member agency(-ies) of the GSA(s) in their basin(s) (e.g., resource conservation districts, nonprofit organizations, Tribes, etc.) that have potential activities, tasks, and/or components that are complimentary to the overall grant application and proposed project. These activities, tasks, and/or components should be included within the proposed application with the GSA or member agencies of a GSA listed as the applicant and potential Grantee. The stakeholder(s) and/or non-member agency(-ies) would be listed as a cooperating entity. DWR strongly recommends working with all potential stakeholders within the basin(s) to ensure that a well-rounded GSP is developed and successfully implemented.

The grant applicant is the agency submitting the application (e.g., GSA) on behalf of the basin. The grant applicant is also the agency that would enter into an agreement with the State, should the application be successful. If there is more than one eligible agency within a basin, an eligible agency may be part of the proposal as a project proponent but must identify a single entity that will act as the grant applicant and submit a basin-wide application and receive the grant on behalf of the basin. Applicants are encouraged to extend an invitation to stakeholders and other non-member agencies of the GSA(s) in their basin(s) (e.g., resource conservation districts, nonprofit organizations, Tribes, etc.) that have potential activities, tasks, and/or components that are complimentary to the proposed project in the grant application. These activities, tasks, and/or components should be incorporated within the proposed application. Project proponents would access grant funding through their relationship with the grant applicant, at DWR's discretion.

B. Eligible Project Types

Eligible projects must be within a basin or a non-adjudicated portion of a basin that are designated by DWR as high and medium priority basins, or COD basins, by the 2018 SGMA Basin Prioritization. Eligible projects include those activities associated with the development or implementation of a GSP(s) that will comply with and **meet DWR requirements and GSP regulations**. Projects must support groundwater sustainability planning and management within medium and high priority basins and should assist in the development and implementation of a GSP(s) in reaching sustainability. Eligible project activities must be consistent with the purpose of Proposition 68, Chapter 11.6. Activities within the proposed project should also be consistent with the SGMA Guidance Documents located here: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents.

Projects that are in basins determined to be probationary under SGMA by State Water Resources Control Board (SWRCB), or in a basin in which an Alternative is approved **are not** eligible for this grant program. The project area and service area must be within a DWR Bulletin 118 (2016) basin or a non-adjudicated portion of a basin that are designated by DWR as high and medium priority basins, including COD basins, by the 2018 SGMA Basin Prioritization. Please check the links provided in the Foreword for additional information on Bulletin 118, Basin Prioritization, CODs, and GSA Formation.

The use of the term "project" refers to the planning and development activities associated with completing a GSP and can include multiple components and/or tasks. A proposal may include all required sections of a GSP or only those portions that are remaining and require funding to complete. A proposal, or project for purposes of this PSP, refers to all the supporting documentation submitted that details the actions that are proposed for the funding. The application will describe a single proposal/project; however, each application may contain multiple components and tasks that collectively makeup a single proposal/project. See the 2019 Guidelines, Appendix B for further definitions of components and project.

In Attachment 3 – Work Plan, applicants must provide information to demonstrate eligibility and provide assurances that the work described in the proposed project is not duplicative with any other projects previously funded through Proposition 1 within the basin boundary.

Examples of eligible project tasks and/or components can include, but are not limited to, the following:

- Tasks and activities that results in the development of all sections of a GSP as outlined in the GSP regulations. Those sections may include, but not be limited to:
    - An introduction outlining the purpose of the GSP, sustainability goal(s), agency information, and a description of how the GSP is organized including the preparation checklist
    - Description of the plan area with a summary of the jurisdictional areas and features, water resources monitoring and management programs, land use elements or topic categories of applicable general plans, additional GSP elements (e.g., control of saline water intrusion, wellhead protection, migration of contaminated groundwater, well abandonment and destruction program, replenishment of groundwater extractions, conjunctive use and underground storage, etc.), and notice and communication of beneficial uses and users in the basin
    - The development of and explanation of the hydrogeologic conceptual model with cross-sections; physical characteristics; current and historical groundwater conditions; water budget information with the inflows, outflows, and change in storage; and management areas (as applicable)
    - A discussion on the sustainability goal(s), measurable objectives, minimum thresholds, undesirable results, and monitoring network
    - A list and discussion of the projects and management actions needed to achieve sustainability goal(s)
    - A discussion on the estimate of the GSP implementation costs, schedule for implementation, annual reporting, and periodic evaluations
- Vulnerability or risk assessments associated with implementation of sustainability goals and objectives
- Evaluate the groundwater management needs of SDACs, including actions that foster engagement of SDACs in sustainable groundwater planning activities related to sustainability goals and objectives
- Develop scoping or feasibility studies as they relate to data management systems or implementation projects related to groundwater sustainability plan goals and objectives
- Design and environmental planning in conjunction of a relevant groundwater sustainability implementation project (not planning alone)
- Develop pilot or demonstration projects such as aquifer recharge, conjunctive use, and stormwater capture
- Installation of groundwater monitoring wells related to a GSA's monitoring network
- Instrumentation and other monitoring equipment on existing monitoring and/or production wells

IV. Solicitation Process and Schedule

The solicitation period will be open for five (5) weeks in Summer 2019, with anticipated grant awards in Winter 2019. The anticipated schedule for this grant solicitation is presented in Table 2 – Schedule for Sustainable Groundwater Planning – Round 3 Grant Solicitation. Any change or update to the schedule will be posted on the DWR website. Updates may also be notified through e-mail announcements. To be placed on the SGM e-mail contact list, please use the link listed in the Foreword.

TABLE 2 – SCHEDULE FOR SUSTAINABLE GROUNDWATER PLANNING – ROUND 3 GRANT SOLICITATION

Milestone or Activity	Tentative Schedule*
Final 2019 Guidelines and PSP posted to open solicitation	Summer 2019
Applicant Workshop(s)	Summer 2019
Announcement of Solicitation Closes	Fall 2019
Final Awards	Winter 2019
** Dates are subject to change and will be determined based on number of comments received for the draft documents, number of applications received, amount of funds requested, and number of grant awards given.*	

Applicant workshop(s) will be conducted to address questions and to provide general assistance to potential applicants preparing grant applications. Details of the workshop(s) will be provided via the SGM website, e-mail distribution list, and/or news release. In addition to the informational workshop(s), applicants are encouraged to seek assistance from DWR staff in understanding SGM requirements and completing grant applications. Questions can be submitted via the contact information provided in the Foreword on Page 2.

V. APPLICATION INSTRUCTIONS

This section provides instructions for preparing and submitting an application and consists of two subsections: A. *What to Submit* and B. *How to Submit*. It is important that applicants follow the Application Instructions to ensure that their application will address all the required elements. Applicants are reminded that once the application has been submitted to DWR, any privacy rights as well as other confidentiality protections afforded by law with respect to the application package, will be waived. Prior to beginning the application, applicants should verify that they meet the Eligible Criteria outlined in the 2019 Guidelines, Section III.C. and in Table 3 below.

TABLE 3 – SGM PLANNING GRANT ELIGIBILITY CHECKLIST

Criteria Type	Eligibility Criteria	Additional Details	Place to Provide Information	Criteria Met (Yes, No, or NA[2])
Applicant Eligibility	Is the applicant eligible?	2019 Guidelines & PSP Section III.A.	Attachment 2	
	Agricultural Water Management Compliance Link: https://water.ca.gov/Programs/Water-Use-And-Efficiency	2019 Guidelines Section III.C. & PSP Section V.B.	Attachment 2	
	California Statewide Groundwater Elevation Monitoring (CASGEM) Compliance Link: https://water.ca.gov/Programs/Groundwater-Management/Groundwater-Elevation-Monitoring--CASGEM. Basin Prioritization information can be found at: https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization	2019 Guidelines Section III.C. & PSP Section V.B.	Attachment 2	
	Climate Change Compliance	2019 Guidelines Section III.C.	GRanTS[1] Application	
	Groundwater Management Compliance, SGMA Compliance	2019 Guidelines Section III.C.	Self-Cert, Attachment 2	
	Open and Transparent Water Data	2019 Guidelines Section III.C.	Self-Cert	
	Public Utilities and Mutual Water Companies Compliance	2019 Guidelines Section III.C.	Attachment 2	
	Stormwater Resources Plan (SWRP) Compliance Senate Bill (SB) 985 Link: https://www.waterboards.ca.gov/water_issues/programs/grants_loans/swrp/	2019 Guidelines Section III.C. & PSP Section V.B.	Attachment 2	

TABLE 3 – SGM PLANNING GRANT ELIGIBILITY CHECKLIST

Criteria Type	Eligibility Criteria	Additional Details	Place to Provide Information	Criteria Met (Yes, No, or NA[2])
Applicant Eligibility (cont.)	Surface Water Diverter Compliance	2019 Guidelines Section III.C. & PSP Section V.B.	Attachment 2	
	Sustainable Water Use and Demand Reduction Compliance	2019 Guidelines Section III.C.	Self-Cert	
	Urban Water Management Compliance Link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater.	2019 Guidelines Section III.C. & PSP Section V.B.	Attachment 2	
	Water Metering Compliance	2019 Guidelines Section III.C.	Self-Cert	
Proposal Eligibility	Only one application per basin OR Applicant is acting as the sole GSA over multiple basins	PSP Section III.A.	NA	
	Does the proposal include design, construction, operation, mitigation, or maintenance of Delta conveyance facilities?	PSP Table 4	GRanTS Application	
	Does the proposal include acquisition of water except for projects that will provide fisheries or ecosystem benefits or improvements that are greater than required currently applicable environmental mitigation measures or compliance obligations?	PSP Table 4	GRanTS Application	
	Does the proposal include any share of the costs of remediation recovered from parties responsible for the contamination of a groundwater storage aquifer?	PSP Table 4	GRanTS Application	
	Does the proposal include projects or groundwater planning activities associated with adjudicated groundwater basins?	PSP Table 4	GRanTS Application	
Project Type Eligibility	Does the proposed planning project(s) include the development and/or implementation of a GSP?	2019 Guidelines and PSP Section III.B.	Attachment 3	
	Is the project area and service area within a DWR Bulletin 118 (2016) basin or a non-adjudicated portion of a basin that are designated by DWR as high or medium priority basins?	2019 Guidelines and PSP Section III.B.	Attachment 3	
	Is the project consistent with Program Preferences?	2019 Guidelines Section V.	NA	
	If the project is a stormwater and/or dry weather runoff capture project, is it included in a SWRP that has been incorporated into an Integrated Regional Water Management (IRWM) plan?	2019 Guidelines Section III.C and PSP Table 4	GRanTS Application, Attachment 2	

[1] GRanTS = DWR's Grant Review and Tracking System
[2] NA = not applicable

A. What to Submit

Applicants must submit a complete SGM Grant Application during the open filing phase as shown in Table 2 – Schedule for Sustainable Groundwater Planning – Round 3 Grant Solicitation. The grant application consists of five sections or "Tabs", as follows:

- Applicant Information Tab
- Projects Tab
- Questions Tab
- Climate Risk in Investments Tab
- Attachments Tab

Additional details regarding the "Tabs" is outlined in Table 4 – Grant Application Checklist, which is provided as a guide for applicants to ensure the required information is submitted for a complete application.

If an applicant applies for multiple project components, the applicant must ensure that the "Tabs" are complete for each of the project components within the grant application. For example, proposals may include separate project components for different SDACs within a basin or multiple project components for GSP development executed by different GSAs within a basin. However, proposals may include multiple project components with the project budgets collectively not exceeding $2 million for high and medium priority basins. Each application must have a singular defined project that can be comprised of multiple project components; however, each component must be related to one another and be coherent.

B. How to Submit

Applicants must submit a complete application online using DWR's GRanTS electronic submittal tool. GRanTS can only be accessed with Internet Explorer and Google Chrome. The name of this PSP in GRanTS is "SGM Planning – Round 3". To access this PSP, applicants must register and have an account in GRanTS if they have not already done so. The online application will be available no later than the date specified on the website, according to Table 2 – Schedule for Sustainable Groundwater Planning – Round 3 Grant Solicitation.

Applicants are encouraged to watch the "How to Register" and the "How to Complete a Grant Application" videos and review the GRanTS Public User Guide and Frequently Asked Questions prior to completing the online application. If an applicant has questions as to the content or the information requested in the PSP, or questions or problems with GRanTS, please refer to the phone number or e-mail listed in the Foreword.

When uploading an attachment in GRanTS, the following attachment title naming convention must be used: Att#_SGM_ AttachmentName_#ofTotal#, where "#ofTotal#" identifies the number of files that make up an attachment, where "#" is the number of a file and, and where "Total#" is the total number of files submitted in the attachment. This naming convention will be repeated in more detail for each Attachment in the following pages.

File size for each attachment submitted via GRanTS is limited to 2 gigabytes (GB). Breaking documents into components such as chapters or logical components so that files are less than 2 GB will aid in uploading files. Acceptable file formats are: PDF, MS Word, MS Excel, or MS Project. However, DWR prefers and highly encourages applicants to use PDF files. All portions of the GRanTS application must be received in the open filing phase. Submittals received outside the open filing phase may not be reviewed or considered for funding. The GRanTS system will allow applicants to resubmit any attachments before the close of the open filing phase. Applicants must notify DWR via SGWP@water.ca.gov when the proposal submittal is ready for DWR's review.

Note: Please provide answers to only the questions listed in Table 4. Do not answer questions that appear on the screen in GRanTS that are not listed below, unless marked with an asterisk.

TABLE 4 – GRANT APPLICATION CHECKLIST

APPLICANT INFORMATION TAB ***The following information is general and applies to the applicant and the overall proposal.*** *Specific project information should be detailed on separate project tabs provided in the GRanTS application. Applicants must enter all information listed in the Information Tab of this checklist (Table 4) along with any field marked with an asterisk.*	
	Organization Name: Provide the name of the Agency/Organization responsible for submitting the application. Should the proposal be successful, this Agency/Organization will be the Grantee.
	Point of Contact: • Select "Existing Register Users" to select the registered user associated with the organization specified above. The rest of the contact information (Division, Address, e-mail, etc.) are auto populated once the above registered user is selected. • Select "Add New User" to add an unregistered user. Please select Division (address will be auto populated) and type the First Name, Last Name, e-mail, and phone (Direct) of the new user. Please note that the e-mail address will be the new user's login name.
	Point of Contact Position Title: Provide the title of the point of contact person. (Maximum Character Limit: 50)
	Proposal Name: Provide the title of the proposal. (Maximum Character Limit: 150)
	Proposal Objective: Provide the objective of the proposal. (Maximum Character Limit: 2,000)
PROPOSAL BUDGET *For the proposal, the following budget items should be taken from Table 5A/B – Grant Proposal Summary Budget.*	
	Other Contribution: Provide the amount of other funds (such as other State grants) not included in the categories as listed below. If there is no other contribution, enter zero. Other Contribution costs are not considered part of the total project cost. **NOTE:** if the county in which the basin is located received SGM Proposition 1 Counties with Stressed Basins and/or SGM Proposition 1 2017 Groundwater Sustainability Plans and Projects funding from DWR, describe how the tasks are not duplicative or inconsistent with previously funded tasks.
	Local Contribution (Cost Share): Provide the total local cost share that will be committed to the proposal. The SGM requires a minimum local cost share of 25% of total proposal cost unless the project benefits a DA.
	Federal Contribution: Enter Federal funds being used. If none, enter zeros.
	In-kind Contribution: Leave Blank and include all In-Kind Contributions in the Local Contribution total.
	Grant Funds Requested: Provide the amount of total grant funds requested.
	Total Proposal Cost: Provide the total proposal cost, in dollars. This amount must agree with the total proposal cost shown in Attachment 5 – Schedule and is the sum of the Local Contribution (Cost Share), In-kind Contribution, and Grant Funds Requested.
GEOGRAPHIC INFORMATION GRanTS requests latitude and longitude in degrees, minutes, and seconds. You may use converters on the web such as https://www.fcc.gov/media/radio/dms-decimal	
	Latitude: Enter the Latitude at the location that best represents the project area.
	Longitude: Enter the Longitude at the location that best represents the center of the project area.
	Longitude/Latitude Clarification: Only use if necessary. (Maximum Character Limit: 250)
	Location: Identify the approximate location that best represents the center of the project area. (Maximum Character Limit: 100)
	County(ies): Provide the county(ies) in which the project is located.
	Groundwater Basins: Provide the groundwater basin(s) as listed in the current version of DWR Bulletin 118 (https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118) in which the project is located. For proposals covering multiple groundwater basins, hold the control key down and select all that apply.
	Hydrologic Regions: Provide the hydrologic region in which the project is located. For proposals covering multiple hydrologic regions, hold down the control key and select all that apply.
	Watershed(s): Provide the name of the watershed(s) the groundwater basin underlies. (Maximum Character Limit: 250) A map of California watersheds can be found at the following link: https://www.conservation.ca.gov/dlrp/grant-programs/watershed/Documents/CALFED_Watershed_Map[1].pdf. If the groundwater basin covers multiple watersheds, you may only provide one "Unique Watershed Number" as listed on the watershed map.
LEGISLATIVE INFORMATION	
	Enter the State Assembly, State Senate, and U.S. Congressional Districts in which the groundwater basin is located. For proposals covering multiple State Assembly, State Senate, and U.S. Congressional Districts, hold the control key down and select all that apply. Maps of these districts are found at: http://www.legislature.ca.gov/legislators_and_districts/legislators/your_legislator.html.

TABLE 4 – GRANT APPLICATION CHECKLIST

PROJECTS TAB ***This section contains information about the project contained in the Proposal.*** *Applicants must enter all information listed in the Projects Tab of this checklist (Table 4) along with any field marked with an asterisk.*	
PROJECT INFORMATION	
	Project Name: Provide the title of the proposal. (Maximum Character Limit: 150 characters) DO NOT include the solicitation name in the project name (e.g., 2019 SGM Planning Grant for GSP Development). Please use the Basin or GSA name plus the Project Name (e.g., XX Basin GSP Development, Well Installation Project and XX Basin GSP Development, etc.)
	Implementing Organization: Should be the title of the GSA applying or the entity name applying on behalf of a GSA
	Secondary Implementing Organization: Not applicable to this solicitation
	Proposed Start Date: Must be after July 1, 2017
	Proposed End Date: Must be before April 30, 2022
	Scope of Work: (Maximum Character Limit: 500 characters)
	Project Description: (Maximum Character Limit: 2,000 characters)
	Project Objective: (Maximum Character Limit: 500 characters)
PROJECT BENEFITS INFORMATION *Please do not enter any information into GRanTS for the following Project Benefits Questions. These are standard GRanTS questions and cannot be removed, but are unnecessary for SGM Grant applicants.*	
	Benefit Level: Leave blank.
	Benefit Type: Leave blank.
	Benefit: Leave blank.
	Description: Leave blank.
	Measurement: Leave blank.
PROJECT BUDGET *For each project, the following budget items should be taken from Table 5A/B – Grant Proposal Summary Budget.*	
	If only one project is being proposed, use the "Copy Budget data from Applicant Info" feature to populate previously entered data. Otherwise, enter individual budget items for each project component in the same manner as described for the Applicant Information Tab. The sum of the budget items must agree with the total project budget.
GEOGRAPHIC INFORMATION	
	Enter the geographical information for each individual project and project component location (latitude and longitude in degrees, minutes, and seconds).
LEGISLATIVE INFORMATION *(Note: for each Project; different from Applicant Information)*	
	If only one project is being proposed, use the "Copy Legislative data from Applicant Info" feature to populate previously entered data. Otherwise, enter legislative information for each project in the same manner as described for the Applicant Information Tab. For projects covering more than one district, hold the control key down and select all that apply.
QUESTIONS TAB *The answers to these questions will be used in processing the application and determining eligibility and completeness.*	
	Q1. Project Description: Provide a brief abstract of the proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. (25 words or less)
	Q2. Previous Funding: Has the applicant received prior funding through the Proposition 1 SGWP Round 2 grant? If so, how much funds did the applicant receive?
	Q3. Project Representative: Provide the name and details of the person responsible for signing and executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Representative. Other entities included in the GSA can be listed here.
	Q4. Project Manager: Provide the name, title, and contact information of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.
	Q5. Eligibility: Has the applicant met the requirements of DWR's CASGEM Program?
	Q6. Eligibility: Q6.1 Is the applicant an agricultural water supplier? (Yes/No) Q6.1.a If yes, has the applicant submitted a complete Agricultural Water Management Plan (AWMP) to DWR? (Yes/No) Q6.1.b If yes, has the AWMP been verified as complete by DWR? (Yes/No) Q6.1.c If the AWMP has not been submitted, explain and provide the anticipated submittal date.

TABLE 4 – GRANT APPLICATION CHECKLIST

QUESTIONS TAB (cont.) *The answers to these questions will be used in processing the application and determining eligibility and completeness.*	
	Q7. Eligibility: Q7.1 Is the applicant an urban water supplier? (Yes/No) Q7.1.a If yes, has the applicant submitted a complete Urban Water Management Plan (UWMP) to DWR? (Yes/No) Q7.1.b If yes, has the UWMP been verified as complete by DWR? (Yes/No) Q7.1.c If the UWMP has not been submitted, explain and provide the anticipated date for submittal.
	Q8. Eligibility: Q8.1 Is the applicant a surface water diverter? (Yes/No) Q8.1.a If yes, has the applicant submitted to the SWRCB their surface water diversion reports in compliance with requirements outlined in Part 5.1 (commencing with §5100) of Division 2 of the Water Code? (Yes/No) Q8.1.b If the reports have not been submitted, explain and provide the anticipated date for meeting the requirements.
	Q9. Eligibility: Does the proposal include any of the following activities: • The potential to adversely impact a wild and scenic river or any river afforded protection under the California or Federal Wild and Scenic Rivers Act • Acquisition of land through eminent domain • Design, construction, operation, mitigation, or maintenance of Delta conveyance facilities • Acquisition of water except for projects that will provide fisheries or ecosystem benefits or improvements that are greater than required currently applicable environmental mitigation measures or compliance obligations • Pay any share of the costs of remediation recovered from parties responsible for the contamination of a groundwater storage aquifer • Projects or groundwater planning activities associated with adjudicated groundwater basins. If yes, the project is not eligible to receive grant funding.
	Q10. Eligibility: Consistency with California SB 985– Stormwater Resource Planning Act: To satisfy SB 985 requirements, stormwater and dry weather capture project must be listed in a SWRP that is consistent with the relevant code provisions enacted by SB 985 (Water Code §10562 (b)(7)) as determined by the SWRCB.
	Q11. DA Cost Share Waiver or Reduction: Are you applying for cost share waiver or reduction as a DA? Fill out Attachment 6 – DAC, SDAC, and/or EDA, as appropriate.
	Q12. Certification: By submitting the application, the Project Director is certifying that: a) The applicant is an eligible entity; b) He/She is aware that any attachment exceeding the page limit listed in the attachment templates will not be reviewed; c) He/She is aware that, once the proposal is submitted in GRanTS, any privacy rights and other confidentiality protections offered by law with respect to the application package and project location are waived; and d) He/She has read and agrees to all of the Terms and Conditions of the grant agreement.
CLIMATE RISK IN INVESTMENTS TAB *The answers to these questions are optional and will be used in surveying Program applicants.*	
	Q13. Climate: Does the organization have a strategic business plan? (Yes/No. If Yes, please submit a copy)
	Q14. Climate: Has the organization conducted a climate change vulnerability assessment? (Yes/No. If Yes, please submit a copy)
	Q15. Climate: Does the organization have a main contact person for climate change? (Yes/No. If Yes, to what position in the origination does that person report?)
	Q16. Climate: Has the organization considered the risk of climate change in its capital reserves and investments? (Open ended; one-three paragraphs, with specific examples, should suffice).

ATTACHMENTS TAB

Provide the attachments listed below by attaching files to the GRanTS application. When attaching files, please use the naming convention found in Section V.B of this PSP. Requirements for information to be included in these attachments are found in Section V.B.2 of this PSP or in the supplied templates.

	ATTACHMENT #	ATTACHMENT TITLE
	Attachment 1	Authorizing Documentation (e.g. resolution)
	Attachment 2	Eligibility Applicant Documentation
	Attachment 3	Work Plan (**Applicant MUST use supplied template**)
	Attachment 4	Budget (**Applicant MUST use supplied template**)
	Attachment 5	Schedule (**Applicant MUST use supplied template**)
	Attachment 6	SDAC, DAC, and/or EDA (as applicable)

ATTACHMENTS TAB INSTRUCTIONS

Within the Attachments Tab, applicants are required to submit up to six (6) attachments (as applicable) to complete the 2019 SGM Planning Grant application. A discussion of each attachment is provided below. Attachments 1 and 2 (Authorizing Documentation and Eligibility Applicant Documentation) are mandatory and provide back-up documentation for the eligibility of an applicant. Attachments 3 through 5 (Work Plan, Budget, and Scope) are also mandatory and will be scored during the application review. Attachment 6 (SDAC, DAC, and/or EDA) is optional, but must be submitted if the applicant is requesting a cost share waiver or reduction, or for SDAC eligibility, as applicable.

ATTACHMENT 1. AUTHORIZING DOCUMENTATION

For the "AttachmentName" in the naming convention of GRanTS, use "Att1_SGM_AuthDoc_#of#" for this attachment.

The applicant must provide a resolution adopted by the applicant's governing body designating an authorized representative to submit the application and execute an agreement with the State of California for a 2019 SGM Planning Grant. If an entity is acting on behalf of a GSA, then a resolution from the GSA is required authorizing the applicant entity to act in such role. Furthermore, a resolution is required by the entity acting as applicant stating authorization to work on behalf of the GSA. If the resolution cannot be signed prior to the application due date, please contact DWR, as indicated in the Foreword, to discuss the situation and explain this in Attachment 1, including an anticipated submittal date for the approved resolution. A Grant Agreement cannot be signed without an adopted resolution signed by the appropriate authorities.

The following text box provides an example of the resolution that must be submitted to fulfill this requirement.

RESOLUTION NO. _____

Resolved by the *<Insert name of applicant governing body>*, that application be made to the California Department of Water Resources to obtain a grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning Grant pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) (Water Code §79700 *et seq.*) and/or the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68), and to enter into an agreement to receive a grant for the: *<Insert name of proposal>*. The *<Insert title of authorized applicant official>* of the *<Insert name of applicant>*, or designee is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement with California Department of Water Resources. Passed and adopted at a meeting of the *<Insert name of applicant >* on *<Insert date>*.

Authorized Original Signature: _____

Printed Name: _____

Title: _____

Clerk/Secretary: _____

CERTIFICATION

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the *<Insert name of applicant>* held on *<Insert Date>*.

Clerk/Secretary: _____

ATTACHMENT 2. ELIGIBILITY DOCUMENTATION

For the "AttachmentName" in the naming convention of GRanTS, use "Att2_SGM_EligDoc_#of#" for this attachment.

The applicant must provide the following information, as applicable. Details for the following eligibility criteria can be found in Section III.C. of the 2019 Guidelines.

- Is the applicant a public agency, nonprofit organization, public utility, federally recognized Indian Tribe, California Native American Tribe, or mutual water company (Water Code § 79712(a))? Please explain.
- Agricultural Water Management Compliance
- CASGEM Basin Prioritization and Compliance
- Climate Change
- Groundwater Management Compliance
- Open and Transparent Water Data
- Public Utilities and Mutual Water Companies
- SWRP Compliance (California SB 985)
- Surface Water Diverter Compliance
- Sustainable Water Use and Demand Reduction
- Urban Water Management Compliance
- Water Metering Compliance

ATTACHMENT 3. WORK PLAN

For the "AttachmentName" in the naming convention of GRanTS, use "Att3_SGM_WrkPlan_#of#" for this attachment. Attachment 3 must be consistent with and support the Budget and Schedule (Attachments 4 and 5, respectively). The Work Plan template should be downloaded from DWR's SGM webpage at the following link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater.

The Work Plan must not exceed 25 pages using a minimum Arial, 10-point type font, not including maps, supporting letters, figures, or tables. Please refer to the template for specific details that should be included. An outline and general description are provided in the table below. Any changes made to this template will not be reviewed or scored by DWR technical staff.

Section Title	Section Description	Maximum Page Limit
Project Justification		
PROJECT DESCRIPTION	All applications must provide a proposed project description that addresses the requested information identified in the template.	Must not exceed 5 pages (not including tables and figures)
PROJECT BENEFITS	Project benefits are the expected measurable accomplishments of a project. Benefits should be based on estimated measures of project annual accomplishments averaged over the period of project life.	Must not exceed 2 pages
TECHNICAL NEED	Applicants must provide an explanation of their "Technical Need" for each proposed project. The applicant must provide documentation that tasks associated with implementation components in the Work Plan will be prepared by or under the direction of a professional geologist or professional engineer, per Public Resources Code § 354.12 Subarticle 2.	Must not exceed 2 pages
Project Details		
If awarded, this information will be used to develop the Grant Agreement. The Project Details should include, at a minimum: 1. a scope of work including work items to be performed (consistent with the Budget and Schedule, Attachments 4 and 5, respectively) and 2. proposed project deliverables for assessing progress and accomplishments.		

Section Title	Section Description	Maximum Page Limit
Scope of Work and Deliverables		
SCOPE OF WORK	The scope of work must list and concisely describe the necessary task(s) to complete the project. The Project Details of the Work Plan should identify how the interested parties including groundwater users, stakeholders, and the general public will be informed about the proposed project progress and how relevant reports and data will be disseminated to these groups. All activities identified in the Project Details of the Work Plan must demonstrate the need for the proposed project and how it will lead to the development of a complete GSP compliant with the GSP Regulations.	Must not exceed 8 pages
PROJECT DELIVERABLES	Project deliverables should be actual work products that can be submitted to DWR (see examples listed in the template). Also, include the status of any task including estimated percent (0 – 100%) completed. Also, explain the plan for environmental compliance and permitting, if applicable, per the directions in the template.	Must not exceed 3 pages
Miscellaneous		
PROJECT SUPPORT	Applicants requesting funding must provide documentation to demonstrate support for the proposed project and must include specific information based on whether the applicant is the GSA for the basin or is not the GSA for the basin. Refer to the template for specifics.	Must not exceed 1 page (not including letters of support)

NOTE: tasks in the proposed project cannot be duplicative or inconsistent with previously funded tasks. If there is additional need for a previously funded task, justification must be provided. If justification for the additional need is not provided, those tasks will not be considered as part of the proposed project and therefore, not considered for funding.

ATTACHMENT 4. BUDGET

For the "AttachmentName" in the naming convention of GRanTS, use "Att4_SGM_Budget_#of#" for this attachment. Attachment 4 includes the estimated costs for the project, as described in the Work Plan (Attachment 3). Applicants MUST use the templates provided at https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater to obtain a budget score. Any changes made to this template not be reviewed or scored by DWR technical staff. Attachment 4 (the combination of Tables 5 and 6, with a written description) is mandatory and includes the estimated capital costs of each component in the application. Use the appropriate Table 5: Proposal Summary Budget Table (Table 5A, No Components) or Component Detailed Budget (Table 5B, Multiple Components). Attachment 4 should be presented in the following sub-sections:

- Grant Proposal Summary Budget Table (Table 5A/5B)
- Proposal/Component Detailed Budget Table (Table 6)

For the Budget Tables, costs must be broken down consistent with how tasks are presented in the Work Plan (Attachment 3). For example, if the Work Plan describes projects at the task and subtask level, the budget must also present costs at the task and subtask level. In addition to the tables, the applicant must provide a description explaining how the values were derived. The description must not exceed two pages per component using a minimum Arial, 10-point type font.

NOTE: the maximum administration budget cannot exceed 10% of the total proposal cost and Grantees shall invoice and report no less frequently than on a quarterly basis.

Grant Proposal Summary Budget

Table 5A/B will be used to present the summarized budget and the cost share for the proposal, including documenting that the proposal will meet the minimum requirement of at least 25% of the

total costs. Although the applicant should complete Table 5A/B column (d) for each individual component (in the Multiple Component version), the minimum cost share requirement applies to the costs of the overall proposal. If the component serves a DA, and is requesting a waiver or reduction of the 25% local cost share requirement, please complete the budget table accordingly and include a footnote identifying the cost share waiver request.

If there are no components to the proposal, Table 5A should be used.

TABLE 5A – GRANT PROPOSAL SUMMARY BUDGET (NO COMPONENTS)

GRANT PROPOSAL TITLE: _____

Grant proposal serves a need of a DAC: ☐ Yes ☐ No

Local Cost Share Waiver requested: ☐ 60% ☐ 100% ☐ No

Budget Categories [1]		(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source[2]	(c) Total Cost	(d) % Local Cost Share (Col (b)/ Col (c))
(a)	Grant Administration	$0	$0	$0	%
(b)	Stakeholder Engagement / Outreach	$0	$0	$0	%
(c)	Planning / Design / Environmental	$0	$0	$0	%
(d)	Implementation / Construction	$0	$0	$0	%
(e)	Monitoring / Assessment	$0	$0	$0	%
Grand Total (Sum Budget Category rows (a) through (e) for each column)		**$0**	**$0**	**$0**	%

[1] Only these Budget Categories shall be used. Tasks can be added for more detail.
[2] List sources of funding: *Use as much space as required here.*

To determine the local cost share required, divide the local cost share by the total cost of the project (grant award plus local cost share). For example, if a Grantee is requesting $400,000 in grant funds, the local cost share should be $135,000 to reach the minimum 25% matching funds for a total cost of $535,000.

If there are components to the proposal, Table 5B should be used.

TABLE 5B – GRANT PROPOSAL SUMMARY BUDGET (MULTIPLE COMPONENTS)

GRANT PROPOSAL TITLE: _____

Grant proposal serves a need of a DAC: ☐ Yes ☐ No

Local Cost Share Waiver requested: ☐ 60% ☐ 100% ☐ No

Budget Categories [1]		(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source[2]	(c) Total Cost	(d) % Local Cost Share (Col (b)/ Col (c))
1	Component 1 Grant Administration	$0	$0	$0	%
2	Component 2 Title	$0	$0	$0	%
3	Component 3 Title	$0	$0	$0	%
n	Component n Title	$0	$0	$0	%
Proposal Total *Sum rows (1) through (n) for each column*		**$0**	**$0**	**$0**	%

[1] These components are shown here for example purpose only. Actual number of components may vary.
[2] List sources of funding: *Use as much space as required*

Proposal/Component Detailed Budget

Table 6 must be completed for each component in the proposal. Table 6 includes the required budget categories listed in Table 5A/B. If applicable, additional rows must be added under the applicable budget categories to present the cost of each task described in Attachment 3 – Work Plan. For example, if the Work Plan describes components at the task and subtask level, the budget must also present costs at the task and subtask level.

TABLE 6 – PROPOSAL/COMPONENT DETAILED BUDGET

GRANT PROPOSAL TITLE: _____

COMPONENT TITLE (IF APPLICABLE): _____

Budget Categories [1]		(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source[2]	(c) Total Cost
(a)	**Component Administration**	**$0**	**$0**	***Total from Table 5 A/B, column (c), row (a)***
	Task 1. xx	$0	$0	--
	Task 2. xx	$0	$0	--
	Task n. xx	$0	$0	--
(b)	**Stakeholder Engagement / Outreach**	**$0**	**$0**	***Total from Table 5 A/B, column (c), row (b)***
	Task 1. xx	$0	$0	--
	Task n. xx	$0	$0	--
(c)	**Planning / Design / Environmental**	**$0**	**$0**	***Total from Table 5 A/B, column (c), row (c)***
	Task 1. xx	$0	$0	--
	Task n. xx	$0	$0	--
(d)	**Implementation / Construction**	**$0**	**$0**	***Total from Table 5 A/B, column (c), row (d)***
	Task 1. xx	$0	$0	--
	Task n. xx	$0	$0	--
(e)	**Monitoring / Assessment**	**$0**	**$0**	***Total from Table 5 A/B, column (c), row (e)***
	Task 1. xx	$0	$0	--
	Task n. xx	$0	$0	--
Grand Total (Sum Budget Category rows (a) through (e) for each column)		***Grand Total from Table 5 A/B, column (a) Proposal Total***	***Grand Total from Table 5 A/B, column (b) Proposal Total***	***Grand Total from Table 5 A/B, column (c) Proposal Total***

[1] Only these Budget Categories shall be used. Tasks can be added for more detail.
[2] List sources of funding: *Use as much space as required here.*

ATTACHMENT 5. SCHEDULE

For the "AttachmentName" in the naming convention of GRanTS, use "Att5_SGM_Schedule_#of#" for this attachment. Attachment 5 shall include a schedule for each component showing the sequence and timing of each of the tasks. Attachment 5 shall also include a schedule for implementation of the proposal showing the sequence and timing of each of the proposed components, as shown in Table 7 – Grant Proposal Schedule.

The Schedule template (Table 7) should be downloaded from DWR's SGM webpage at the following link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater. Any changes made to this template, reluctance to use of the template, or changes made to the font type and size will not be reviewed or scored by DWR's technical staff. However, if there are no components to the proposal, those rows may be removed.

The Schedule, Attachment 5, must be consistent with the Work Plan (Attachment 3) and the Budget (Attachment 4). The proposal completion dates presented in the schedule must have an end date of no later than **April 30, 2022**.

TABLE 7 – GRANT PROPOSAL SCHEDULE GRANT PROPOSAL TITLE: _____			
Categories		**Start Date**	**End Date**
Grant Agreement Administration		**Earliest Start Date**	**Latest End Date**
(a)	Grant Agreement Administration		
Component 1: Title		**Earliest Start Date**	**Latest End Date**
(a)	Component Administration		
	Task 1. xx		
	Task 2. xx		
	Task n. xx		
(b)	Stakeholder Engagement / Outreach		
	Task 1. xx		
	Task n. xx		
(c)	Planning / Design / Environmental		
	Task 1. xx		
	Task n. xx		
(d)	Implementation / Construction		
	Task 1. xx		
	Task n. xx		
(e)	Monitoring / Assessment		
	Task 1. xx		
	Task n. xx		
Component n: Title		**Earliest Start Date**	**Latest End Date**
(a)	Component Administration		
	Task 1. xx		
	Task 2. xx		
	Task n. xx		
(b)	Stakeholder Engagement / Outreach		
	Task 1. xx		
	Task n. xx		
(c)	Planning / Design / Environmental		
	Task 1. xx		
	Task n. xx		
(d)	Implementation / Construction		
	Task 1. xx		
	Task n. xx		
(e)	Monitoring / Assessment		
	Task 1. xx		
	Task n. xx		

ATTACHMENT 6. SDAC, DAC, AND/OR EDA (AS APPLICABLE)

If claiming DA status, then the "AttachmentName" in the naming convention of GRanTS should be "Att6_SGM_ SDAC-DAC-EDA _#of#". Attachment 6 is required for applicants requesting a cost share waiver or reduction.

DWR strongly recommends that applicants consult the 2019 Guidelines Appendix D to determine if the project benefit area includes a DA, and for details on waiving or reducing cost share requirements. Applicants should ensure the description of the DA is adequate for DWR to determine whether the communities meet the definitions.

Include information that supports the project benefits a DA(s), such as a map or shapefile that shows the project benefit area and the location of the DA(s). Include information that demonstrates support for the project by DA(s) (e.g., letter(s) of support from DA(s)).

Where the lack of representative census data that adequately represents the community can be documented, alternative studies (local income surveys, a subset of a block group, etc.) may be substituted in the attachment. In determining the median household income (MHI) for DA, applicants may use a single type of census geography or combinations of census geographies that best represent the DA.

For the applicants with Geographic Information System (GIS) capability, the GIS data files used within the DAC and EDA mapping tools are available to download and use and can be found at the following link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/Mapping-Tools. These GIS files will allow applicants to combine project area shape files with DA data layers. This will help applicants show the extent of overlap or project areas with DAs.

VI. APPLICATION REVIEW

All applications will first be screened for eligibility and completeness in accordance with Section VI. of the 2019 Guidelines and Section III. of this PSP. The information provided by applicants in GRanTS, as well as Attachments 1 through 5 of the application, will be used in determining eligibility and completeness. All proposals shall be submitted into GRanTS by the posted date and time deadline.

All complete and eligible applications will be evaluated, scored and ranked based on the evaluation questions presented below in Table 8 – Application Evaluation Criteria.

For a proposal with multiple components, the evaluation will be repeated for each component. The score for a proposal with multiple components will be determined by summing each individual component's total score, dividing that summation by the number of components (component average score), and then rounding up or down to the nearest whole number (final score).

For example, a proposal that includes three components, the scoring breakdown is as follows:

Component	Component Total Score	Component Average Score	Final Proposal Score
1	10	32 points / 3 projects = 10.67	**11**
2	12		
3	10		
Total Score =	32		

DWR staff may recommend reducing individual grant amounts from the requested amount. However, such reductions will be considered only if technical reviewers have indicated that the budget is too high for the task(s) described or some tasks are determined to be ineligible for the grant program or are not necessary for project completion. A reduction would also be weighed against whether the reduced funding would impede project implementation or if the proposed budget is determined

inconsistent with similar projects. A reduction in requested grant funds can also occur when a greater number of well-qualified projects are requesting grant funds greater than the funding available.

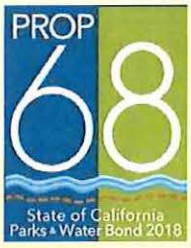
If multiple applications are received within a basin for projects, DWR will contact the applicants and request that a consolidated application for the basin be submitted before the close of the open filing period. If identified after the close of the solicitation, DWR will work with the multiple applicants to consolidate.

VII. Award Process

Funding will be allocated to proposals consistent with minimum and maximum award amounts, using the proposal score, professional judgement, and available funding. DWR's funding recommendation may vary from grant funding request.

Following funding awards, DWR will execute a grant agreement with the Grantee. Grant agreements are not executed until signed by authorized representatives of the Grantee and DWR. The Grantees have approximately six months to obtain an executed grant agreement after the grant award notification letter is sent by DWR. The exact date for grant agreement execution will be outlined in the grant award notification letter. DWR reserves the right to withdraw an award due to lack of responsiveness on the part of the applicant.

TABLE 8 – APPLICATION EVALUATION CRITERIA (FOR PROJECT OR COMPONENT)				
Q#	**Questions**	**Attachment(s)**	**Possible Points**	**Scoring Guidance**
1	Does the Project Justification describe a well-coordinated proposal including a GSP(s) that encompasses the entire basin or describes why a portion of the basin is not covered in the proposal? Does the Work Plan identify the roles and responsibilities of the applicant and cooperating entities?	3	3	0 – No; 1 – Marginally addressed; 2 – Mostly addressed, with minor details not included or unclear; 3 – Fully addressed
2	Does the Project Justification demonstrate the goals, objectives, and needs of the project? If multiple components, does it demonstrate how they work together as a whole to address the goals, objectives, and needs? If the applicant received previous funding, did the applicant provide justification for the additional need requested? Did the applicant identify the DA, Tribe, etc. that the project will benefit? Was there a regional and project map(s) depicting the site location, current conditions, and benefitting area?	3	3	0 – No; 1 – Marginally addressed; 2 – Mostly addressed, with minor details not included or unclear; 3 – Fully addressed
3	Does the applicant demonstrate the appropriate experience, knowledge, and skills necessary to successfully complete the project? Did the applicant provide documentation that tasks associated with implementation components in the Work Plan will be prepared by or under the direction of a professional geologist or professional engineer?	3	2	0 – No; 1 – Less than fully addressed, 2 – Fully addressed
4	Does the Work Plan outline how they will meet the SGMA regulations and DWR requirements in the development of the GSP? Did the applicant provide letters of support from other GSAs in or adjacent to their basin? Did the applicant provide assurances that the GSA, or entity representing a GSA, will have a completed GSP at the close of the grant that will be adopted and submitted to DWR for review by the required due date?	3	3	0 – No; 1 – Marginally addressed; 2 – Mostly addressed, with minor details not included or unclear; 3 – Fully addressed
5	Does the Scope of Work contain a list of deliverables that includes tasks for developing, preparing, and submitting a complete GSP in enough detail that the description can be used to develop a grant agreement, if awarded? Does the Work Plan include a discussion of coordination with other entities, agencies, and/or organizations; detailed description of the approach and practices the project is proposing to use and technical basis for approach; and a discussion of the required permits, environmental documentation and landowner/access agreements required to implement project and their status?	3	3	0 – No; 1 – Marginally addressed; 2 – Mostly addressed, with minor details not included or unclear; 3 – Fully addressed
6	Does the application contain a complete Budget that is reasonable to execute the Work Plan on the Schedule provided? Is the Scope of Work consistent with the Budget and Schedule? (e.g., tasks and subtasks outlined in the Scope of Work are also outlined in the same level of detail within the Budget and Schedule tables?)	3, 4, 5	2	0 – No; 1 – Less than fully addressed, 2 – Fully addressed
7	Collectively, do the Budget and Schedule demonstrate that the project(s) will be completed by the SGMA deadline for the respective basin (January 31, 2022 for high and medium priority basins)?	4 and 5	2	0 – No; 1 – Less than fully addressed, 2 – Fully addressed
8	Given the level of effort described in the Work Plan, does the Schedule seem reasonable?	3 and 5	1	0 – No; 1 – Yes
9	Given the level of effort described in the Work Plan, does the Budget seem reasonable?	3 and 4	1	0 – No; 1 – Yes
Total Range of Possible Points			**0-20**	
		Total Project Level Score for all proposed components		
		Average Project Level Score = (Total Project Score/# of Components); rounded to nearest whole number		



California Natural Resources Agency
Department of Water Resources
Division of
Integrated Regional Water Management

WEBINAR: Bulletin 74 Well Standards Update Kickoff

WHEN:

June 25, 2019 @ 10:00 am – 12:00 pm

(https://cawaterlibrary.net/calendar/)

WEBINAR (HTTPS://CAWATERLIBRARY.NET/CALENDAR/CAT

Groundwater (https://cawaterlibrary.net/calendar/tag_ids~135

As many as two million water wells tap California's groundwater, with approximately 7,000 to 15,000 new wells constructed each year. They range from hand-dug, shallow wells to carefully designed large -production wells drilled to great depths. The Department of Water Resources is responsible for developing minimum well standards for four types of wells, published as DWR Bulletin 74 (https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards) and for serving as the state clearinghouse for Well Completion Reports (https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Completion-Reports).

The Department of Water Resources is launching an update to Bulletin 74 and will host two public webinars to introduce the project and to solicit your input and participation.

Webinar Dates & Times

Thursday, June 20, 2019 @ 1 p.m.-3 p.m.
6/20 Webinar Link: https://csus.zoom.us/j/198499033 (https://csus.zoom.us/j/198499033)
Tuesday, June 25, 2019 @ 10 a.m.-12 p.m.
6/25 Webinar Link: https://csus.zoom.us/j/288745571 (https://csus.zoom.us/j/288745571)
Click on the link at least 15 minutes before the meeting. Download the application to launch the program and follow the prompts to join the audio portion of the meeting.

Register at this link: https://www.eventbrite.com/e/bulletin-74-webinar-kick-off-meeting-tickets-62509170612 (https://www.eventbrite.com/e/bulletin-74-webinar-kick-off-meeting-tickets-62509170612)

CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

NOTICE OF PUBLIC WORKSHOP

CONCERNING AMENDMENTS TO THE WATER QUALITY CONTROL PLANS FOR THE SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS AND TULARE LAKE BASIN TO INCORPORATE A CENTRAL VALLEY-WIDE SALT AND NITRATE CONTROL PROGRAM

NOTICE IS HEREBY GIVEN that the State Water Resources Control Board (State Water Board) will hold a public workshop to receive information and solicit public input regarding the Central Valley-wide Salt and Nitrate Control Program.

Tuesday, July 2, 2019 - 9:30 a.m.
Joe Serna Jr. – CalEPA Headquarters Building
Coastal Hearing Room
1001 I Street, Second Floor
Sacramento, CA 95814

BACKGROUND

The State Water Board is considering approving the Central Valley Regional Water Quality Control Board's (Central Valley Water Board's) Amendments to the Sacramento and San Joaquin Basin Plan and the Tulare Lake Basin Plan to incorporate a Central Valley-wide Salt and Nitrate Control Program (Salt and Nitrate Control Program). The Salt and Nitrate Control Program is intended to provide a framework for the Central Valley Water Board to regulate salt and nitrate while also ensuring that groundwater users whose wells are impacted with nitrates are provided safe drinking water. The proposed Amendments include:

- A Phased Salt Control Program
- A Nitrate Control Program that includes:
  - Early Action Plans to provide Safe Drinking Water
  - Prioritized Groundwater Basins
  - Management Zone Alternatives
- A Conditional Prohibition for Salt and Nitrate Discharges
- Surveillance and Monitoring Program
- Guidance to Implement Secondary Maximum Contaminant Levels
- New and Revised Policies to effectuate the Control Programs, including:
  - Revision of the Salinity Variance Policy
  - Revision of the Exceptions Policy
  - Drought and Water Conservation Policy
  - Offsets Policy
- Definitions and Terminology for the Salt and Nitrate Control Program

ISSUES FOR DISCUSSION AT WORKSHOP

The purpose of the July 2, 2019 workshop is for the State Water Board to receive information from Central Valley Water Board staff and oral comments from interested persons related to the Salt and Nitrate Control Program. The State Water Board may schedule a subsequent Board Meeting to consider approval of the Salt and Nitrate Control Program.

In accordance with Water Code section 13245, water quality control plan amendments adopted by a regional water board do not become effective unless and until approved by the State Water Board. The State Water Board may approve the Salt and Nitrate Control Program or return it to the Central Valley Water Board for further consideration and resubmission to the State Water Board. If the State Water Board approves the Salt and Nitrate Control Program, the State Water Board's approval resolution may include specific directions and expectations regarding the Central Valley Water Board's implementation of the Salt and Nitrate Control Program as long as any such directions or expectations are consistent with the Salt and Nitrate Control Program. Such directions could include, for example, a requirement that the Central Valley Water Board submit periodic reports to the State Water Board on its progress implementing the Salt and Nitrate Control Program. Interested persons should be prepared to discuss any appropriate directions or expectations.

PROCEDURAL MATTERS

This workshop is for informational purpose and no formal action will be taken. There will be no sworn testimony or cross-examination of interested persons, but the State Water Board and its staff may ask clarifying questions.

The workshop is an opportunity for interested persons to provide oral input to the State Water Board. The written comment period has closed, so no written comments will be accepted. To ensure a productive and efficient meeting in which all interested persons have an opportunity to participate, oral comments at the workshop may be time-limited.

The workshop may be able to allocate time for participants with common interests to coordinate and provide oral presentations as a group. For those participants wishing to organize and present comments as a group, please contact Anne Littlejohn by June 19, 2019 at (916) 464-4840 or anne.littlejohn@waterboards.ca.gov to determine if time can be allocated.

WEBCAST OF WORKSHOP

To access the webcast please visit the following link: https://video.calepa.ca.gov/

INFORMATION REGARDING WORKSHOP

Please direct any inquiries concerning this notice to Anne Littlejohn at (916) 464-4840 or anne.littlejohn@waterboards.ca.gov.

Related documents and additional information are available at:
https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/#saltnitrate_cp_bpa

May 31, 2019
Date

Jeanine Townsend
Clerk to the Board